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Exploring the Influence of Faith on Water Saving Behaviors among Christians in Amman, Jordan

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List of Abbreviations

BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung / Federal Ministry for Economic Cooperation and Development
GIZ	Gesellschaft für Internationale Zusammenarbeit / Enterprise for International Cooperation
ToPB	Theory of Planned Behavior
ToRA	Theory of Reasoned Action

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Abstract

As the number and intensity of environmental challenges increase, more faiths have initiated religiously motivated change within their communities or have been involved in cooperation projects with NGOs or GOs dedicated to conservation. Even though a lot of quantitative research had been done on the correlation of religiosity and concern for the environment, no scientific study dealt about the argumentation lines that drive or discourage believers to get involved in environmental conversation.

As a basis for the research the Theory of Planned Behavior of Ajzen was modified into a model. By the means of Semi-Standardized Interview guidelines 15 members and leaders of different church communities in Amman were interrogated to retrieve meaning of and cause-effect-chains between the different components of the model. Their answers were coded and analyzed with cross tables to identify interconnections and their tendencies.

The results show that interviewees' religious convictions about God and the world were the strongest influencer, whereas the community and leaders rarely gave a reason for people to adapt water saving measures. External factors such as governmental, societal, political or economic mostly discouraged people to adapt environment-friendly behaviors. Approaches by the GIZ have already started catering to those challenges and potentials, however the range of impact did not reach until most of the interviewees.

1. Introduction

More and more nations in arid or semi-arid climates suffer from water scarcity. Jordan is among those, but the Jordanian society is not aware of the water scarcity and uses the resources inefficiently. At the same time religion plays a major role in the Jordanian society and cannot be overlooked as an actor. Religious institutions could present a platform to discuss the resource crisis and faith could hold a motivation for people to adapt water sparing behaviors. The Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (BMZ) identified this potential for Jordan and commissioned the Gesellschaft für Internationale Zusammenarbeit (GIZ) with a respectively dedicated project (GIZ 2016).

Similarly, the Alliance of Religions for Conservation (ARC) and the Worldwide Fund for Nature (WWF) for example already worked with faith-based organizations (FBOs) in regard of resource and habitat conservation or wildlife-protection. A lot of successful examples can be listed. These organizations and researchers have continuously reported about success stories when working with FBO towards nature or resources conservation (GIZ 2016; Mcleod, Palmer 2015). However, assumptions on why and how faith can contribute to conservation are rather implicit than explicitly mentioned, yet alone studied. So far, a qualitative study on these cause-effect-chains was not conducted.

Instead, scholars have often tried to correlate the level of general religiosity of people with the level of concern about environmental topics leading to contradicting results. No one interrogated people affiliated with a certain faith whether, why and how exactly their faith was concerned about an environmental problem and what it meant for the people holding that faith (Konisky 2017). Hence, this research is exploring ground which was not yet studied qualitatively. Additionally, the topic of water conservation, which shall be focused on in the context of Jordan, is not so tangible and visible as a vanishing forest or decreasing livelihoods due to destroyed fish stocks, as this was often the target conservation goal in former cooperation with FBOs. This poses more challenges because people are not necessarily directly affected by the consequences.

The purpose of the study is hence to investigate about what elements of faith are influencing people in their general behavior and to trace the existing and potential interconnections to water saving behaviors by doing qualitative research. Participants in the research are leaders and members of churches in Amman, Jordan. With this research a concept could be derived supporting NGOs/GOs like the GIZ to understand how faith works, adapting it for their own field of application to work more effectively with different denominational faith groups. Also, Christian Environmentalists which would like to understand better about constraints and potentials of their faith to foster environmental protection among Christians will find useful conclusions in this research.

2. Conservation and Faith

2.1. Current state of the global environment

Scare news about various forms of environmental degradation all over the world make the headlines in the news. The forms of degradation are manifold and include e.g. deforestation, desertification, marine and terrestrial pollution, climate change, biodiversity loss, forest fires, land system changes and many more.

Steffen et al. (2015) used the Planetary Boundary approach to quantify the anthropogenic impacts on the most crucial earth system. They conclude that five out of nine earth systems are currently at high risk of destabilization. Those systems at risk of destabilization include the nitrogen and phosphorus cycle, biodiversity loss, land-system changes and climate change as can be seen in Figure 1. A destabilization might lead to continental of even planetary catastrophic environmental change (Harris 2012).

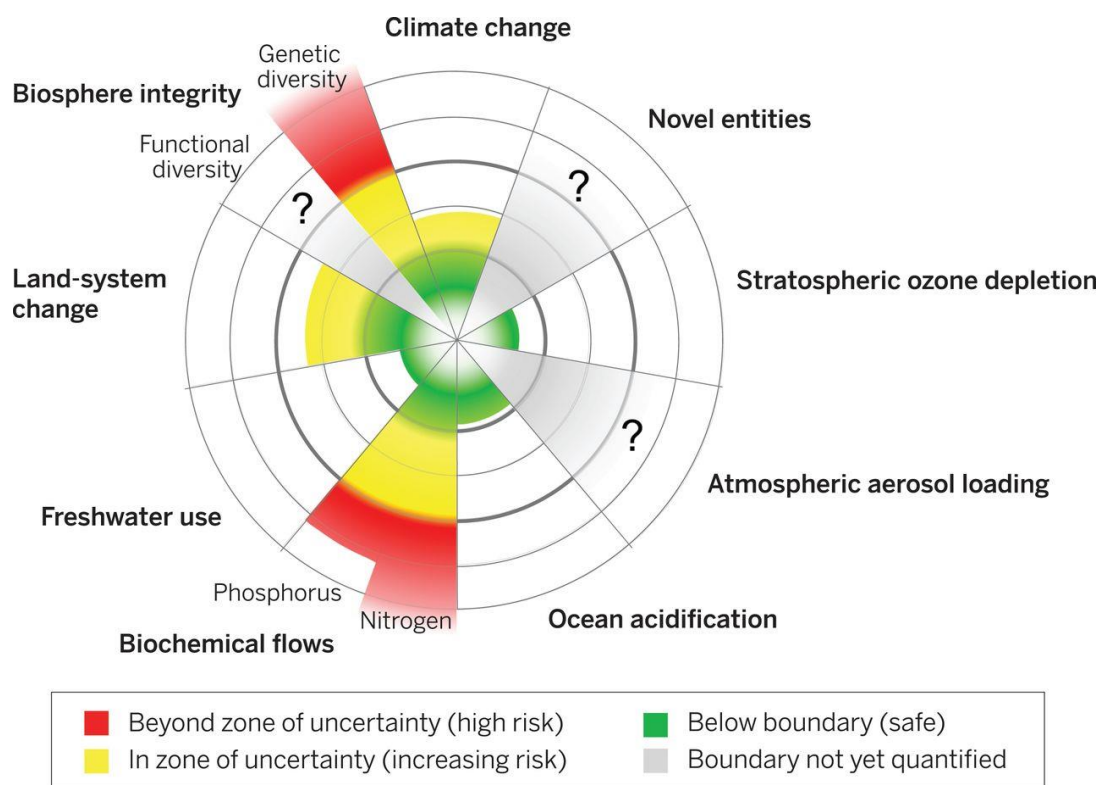


Figure 1: Planetary Boundary Approach – Current transgressions

Science helps to understand the linkages between human activities and environmental degradation. Science, just as the above example of the Planetary Approach, stresses out the necessity to act and might offer several management solutions. Technical innovations and improvements in resource efficiency join the combat against the adverse effects on the environment. Yet, some raise the question: When mankind knows so much about the state of the environment and possesses the technical know-how, why then does the degradation seem to grow worse?

2.2. Faith as the missing link to conservation measures

Several researchers have recognized this paradox: Even though humanity advances in science and technology, whereas the Human Development Index is on the climb globally since 1870 (Prados de Escosura 2015) as tracked in Figure 2, we fail to effectively preserve resources and species, mitigate climate change and address the pollution of marine waters.

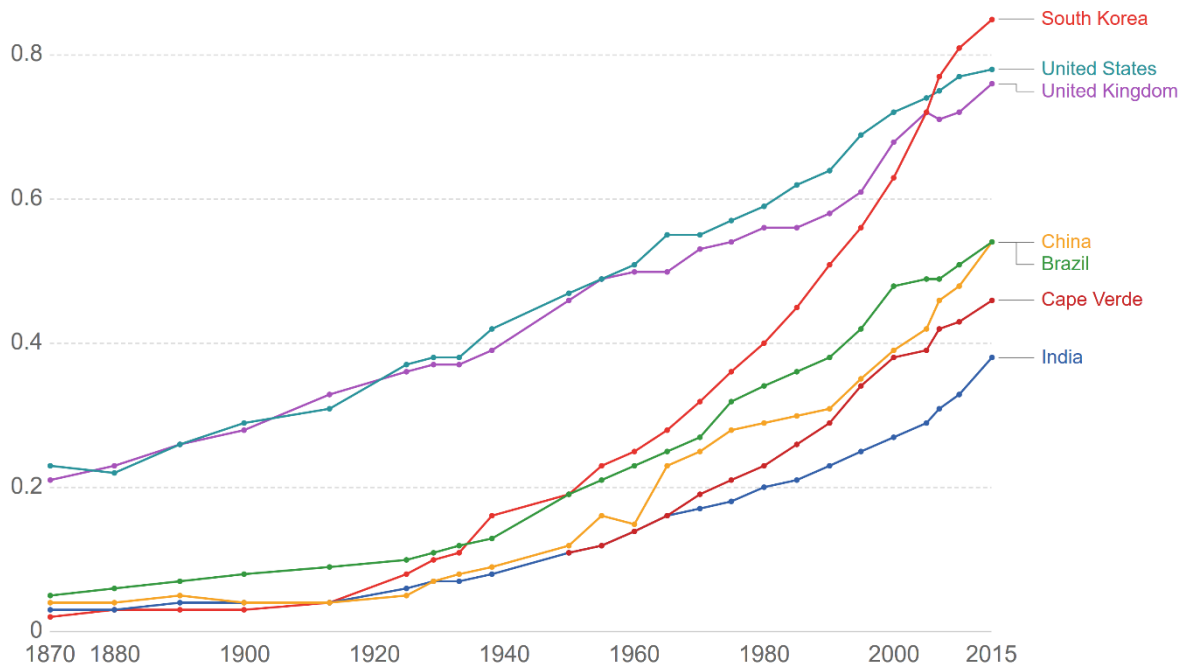


Figure 2: History of Human Development -Historical Index of Human Development (Prados de la Escosura 2018 cited by Our World in Data 2019)

These researchers hold the view that conservation movement have failed, partially due to the negligence of value-driven solutions (McLeod, Palmer 2015; Vucetich, Nelson 2010). Van Houtan (2006) stresses the importance of science to articulate the ecological challenges, however he admits that science cannot formulate ethical values. Science does not tell how mankind shall value nature. It simply states the impact of our activities.

Gus Speth (2013) cited by Harris (2016), an American environmental lawyer and advocate, told a British radio presenter:

"I used to think that top global environmental problems were biodiversity loss, ecosystem collapse, and climate change. I thought that with 30 years of good science we could address these problems, but I was wrong. The top environmental problems are selfishness, greed, and apathy, and to deal with these we need a spiritual and cultural transformation. And we scientists don't know how to do that."

Even decades before Speth's statement, White (1967) shared the opinion that "more science and more technology" would not lead to a prevention of the deeming ecological crisis, but that our attitude towards nature and our perception of the man-nature-relationship are the main obstacles for effectively fight on environmental

degradation. Vucetich and Nelson (2010) agree that without an ethical dimension of sustainability the term itself remains soulless and will not tell us anything about how to achieve sustainability.

Very often religions and their sacred texts were and still are a major source to tremendously influence code of conducts. Faiths hence could give people a spiritual reason and a way how to value nature by shaping motivations and values (Casagrande, Sponsel 2007; Tucker, Grim 2009; Mcleod, Palmer 2015)

Besides this ethically grounded reason, there are also other factors why FBOs should be involved in nature conservation. FBOs make up the largest social organizations in the world, so the message can be effectively spread among a lot of people (Mcleod, Palmer 2015) On top of that about 60% of all people consider themselves as religious and religious leaders are very often the most trusted among a society. In the MENA region 82% described themselves as religious (Stoychev 2015). Faiths can act as a translator for exogenous knowledge about environmental degradation and the necessity to act on that. Rural or local populations probably understand and accept those religious worldviews more easily (Casagrande, Sponsel 2007; Tucker, Grim 2009; Sponsel 2012).

Yet, it must be kept in mind, that working with religions is not the panacea against the global environmental crisis. Sponsel (2007) cited by Mcleod, Palmer (2015) warns of oversimplification of the role of religions because of several reasons:

1. High diversity within one religion
2. Individuals might follow elements of multiple religions
3. Degree of religiosity among members and most importantly
4. Not all believes and practices are beneficent for nature

This fourth reason was recognized and stressed out by White (1967) in his article “The historical roots of our ecological crisis” in which he derives the roots of the ecological crisis - stemming from the Christian View on nature as put out in the creation story in Genesis:

God planned all of this explicitly for man's benefit and rule: no item in the physical creation had any purpose save to serve man's purposes. [...] Christianity [...] not only established a dualism of man and nature but also insisted that it is God's will that man exploit nature for his proper ends. (White 1967)

However, the overall notion of White's paper is debated and questioned since its publication, especially among Christians (Bristow 2001; Jenkins 2009; Mackonyte 2010; Arbuckle, Konisky 2015).

2.3. Survey on contemporary faith-based conservation efforts

The following subchapters shall serve as a literature review in what kind of projects Christian institutions, communities or individuals are already involved. For the reason of completeness, it shall be stressed out that not only Christian FBOs are getting involved but that the joining of conservation efforts with a religious motivation is a global, multi-religious trend. Most of the NGOs or GOs mentioned in chapter 2.3.2 on page 6 cooperate with all FBOs regardless of their religious orientation. In the same way, a lot of non-Christian religious institutions, entities or individuals got active on their own in the past years.

2.3.1. Christianity and Conservation

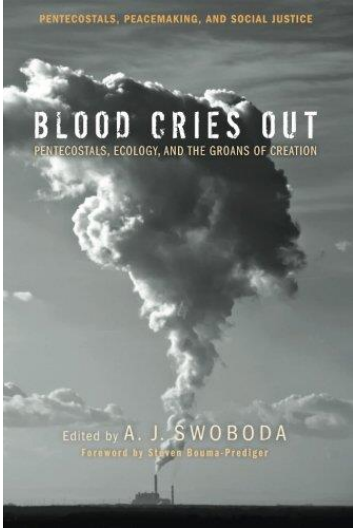
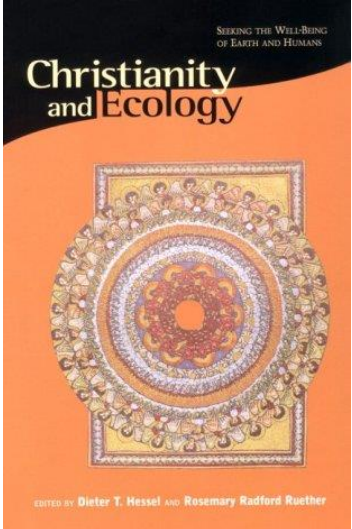
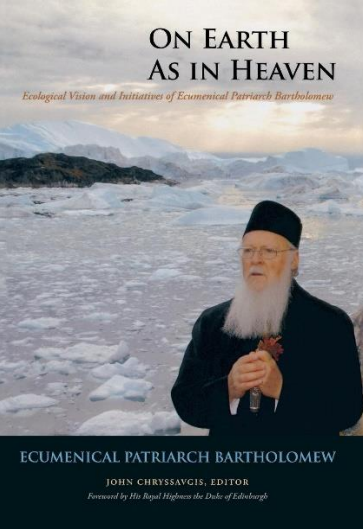
In the contemporary, there are numerous examples of Christian FBOs or individuals getting engaged in the conservation debate. This is not only by Christians being involved in secular groups or activities concerned with conservation, but also by making environmental protection an issue within Christendom: in sermons, rituals, prayers, by religiously justified arguments and appeals.

A prominent example of the recent years is the Encyclica “Laudato Si’” written by Pope Francis of the Catholic Church in 2015. In a long letter to “all people of good will” he points out the ongoing pollution of oceans, loss of biodiversity, destruction of forests, speeding climate change and much more environmental problems. His arguments for action are not merely because of a protection of God’s creation but that fellow humans in other parts of the world are suffering under the consequences. Therefore he calls for actions by the economy, politics and every individual (Pope Francis 5/24/2015).

Some decades before Pope Francis’ well-known appeal it was the Orthodox Patriarch Bartholomew raising awareness for the ecological crisis. Nicknamed “The Green Patriarch” he started his environmental activities in the 80ies (Chryssavgis 2019).

In the meanwhile, numerous books about the interlinkage between Christian Theology and Ecology (sometimes called Eco-Theology) were published not only by Catholic and Orthodox church leaders, but also by Pentecostals or even Ecumenical Councils as can be seen in Table 1.

Table 1: Selection of Books dealing with Christian Theology and Ecology

		
<p>Blood Cries Out Pentecostals, Peacemaking, and social Justice (Swoboda 2014)</p>	<p>Christianity and Ecology Seeking the Well-being of Earth and Heaven (Hessel, Ruether 2000)</p>	<p>On Earth as in Heaven Ecological vision and initiatives of Ecumenical Patriarch Bartholomew (Bartholomew, Chryssavgis 2012)</p>

It's not only books been written but awareness raising, and active involvement spread by conservation and charity organizations among the Christian community as well. For hands on involvement, it can be mentioned for example the "A Rocha International"-Initiative, a self-described Christian conservation organization involved in projects all over the world (A Rocha International 2019). Another one is the "Christians for the Mountains" focusing on protecting environment and people in the Appalachian Region, USA from the bad effects of coal extraction through mountaintop removal (Christians For The Mountains 2019).

Misereor (2018) for example reach out to a Christian audience with their fasting calendar in which a good portion of the content is about sustainability and climate change mitigation. Other organizations also spread material on the topic (Water | Earth Ministry 2019; Micha Deutschland 2019)

2.3.2. NGOs and GOs cooperating with FBOs

At the same time numerous NGOs or GOs have cooperated with Christian FBOs in various kinds of nature conservation projects all over the world: A church community in Lebanon for example partnered with World Wildlife Fund (WWF) and other nature conservation agencies to protect the Harissa Forest (Mcleod, Palmer 2015). The Alliance of Religions and Conservation (ARC) for example is partnering with all religious groups to spread awareness for various topics like conservation of wildlife and nature (ARC 2019). A daughter-organization of the ARC called "Faith in Water" focusses alone on the cooperation with FBOs in regard of water, sanitation and hygiene (Faith in Water 2015).

The United Nations Environmental Program has launched an initiative called “Faith for Earth” in 2017. Its purpose is to include all religions in the process of achieving the SDGs 20130 and specifically to enable FBOs and their leaders to get involved in environmental protection (UNEP - Faith for Earth 2019).

2.4. Presentation of Case Study – Jordan, Amman

Jordan suffers from severe water scarcity. The annual renewable water resources shrank to 100m³/capita lying far below the global water poverty line of 500³/capita. Because the actual water demand is higher than the annual renewable water, the water resources are constantly overexploited due to an increase among the Jordanian population, influxes of Syrian refugees and economic growth. An increasing number of water bodies and aquifers show signs of overuse (GIZ 2016; Ministry of Water & Irrigation 2016b). Among the most prominent surface waterbodies and related ecosystems in Jordan affected by the anthropogenically induced scarcity are the Jordan Valley, the Azraq Oasis and the Dead Sea (Kool 2015; Disi et al. 2004; Tal 2018).

Besides the agricultural sector the domestic sector is the second largest consumer with using 45 % of all water abstracted (Ministry of Water & Irrigation 2016a). However, “(...) despite the tense water supply situation, neither the Jordanian people nor the Syrian refugees are sufficiently aware of the need to conserve water” (GIZ 2016).

Especially in the northern region of Jordan, which is hosting most refugees, water supply is highly intermittent leading to tensions between those two groups. The Gesellschaft für Internationale Zusammenarbeit (GIZ) considered this constellation to be able to kill two birds with one stone: Since the two groups share the same religious affiliation, why not tap into the belief to stress out common ground and motivate people to save water by a religious argumentation line (GIZ 2016)?

2.5. Project “Improvement of communal water efficiency through cooperation with religious authorities”

The GIZ is an enterprise owned by the German government. The GIZ exists since over 50 years and works in the areas of economic development and employment promotion, energy and the environment and peace and security. On behalf of the BMZ (Federal Ministry for Economic Cooperation and Development) which is also the main commissioner of projects (GIZ 2018b), the GIZ started the project called “Improvement of communal water efficiency through cooperation with religious authorities” and summarized their planned outputs in the impact matrix as the following (GIZ 2014, 2018a):

Output a) anchor educational material about water and resource efficiency in different institutions like schools, universities and FBOs

- Train Islamic and Christian Religious Leaders regarding water efficiency
- Development of educational material for governmental schools, churches, mosques and universities

Output b) spread water efficient usage in target communities in Islamic context

- Upgrade pilot mosque to water efficient blue mosques
- Distribute water saving devices among mosques
- provide repair vehicles for technical equipment in mosques

Output c) improve awareness for water and resource efficiency by Islamic argumentation

- develop educational Islam-based awareness material for private households
- cooperate with Ministry of Religion to develop Friday sermons about water usage
- organize interreligious events covering water and resource efficiency
- sounding out of religious judicial Islamic judgements regarding relevant water issues
- carry out awareness campaigns

In the sequence the GIZ cooperated with the relevant ministries, FBOs and individuals in leading position and expanded the program on to Christian communities in 2017 (GIZ 2016, 2018c; Zimprich, Alayed, Date: 2018):

Six priests and pastors from different denominations represented in Amman had been invited to a kick-off workshop in April 2017 at which the GIZ was introduced and the current water situation was discussed. A member of the GIZ-team remembered that some leaders initially were doubting the severity of the water scarcity and were shocked when they heard about numbers and facts gathered in a presentation held by the GIZ during the workshop. Afterwards the attendants were asked to contribute a section for a workbook about the importance of water conservation from Christian perspective (GIZ, Ministry of Water and Irrigation Jordan 2017).

After the workbook followed several other booklets and brochures, and the priest were trained as multipliers. Finally, the priests and pastors were asked to communicate the findings and the importance of water conservation among their parishes by giving several workshops. Also nuns were trained as multipliers due to their religious and educational leadership within communities and schools (Zimprich, Alayed, Date: 2018).

2.6. Research gaps

As any impact matrix states, every output can only be achieved if certain risks are not constraining the implementation. For the impact matrix of the project of the BMZ the risk says for output c):

“under the condition that the society is susceptible for faith-based awareness raising” (GIZ 2014, 2018a)

But what exactly makes a society -specifically the Christian- susceptible to faith-based awareness raising or not? And how can the awareness raising be designed so society reacts susceptible to it?

Even though there are numerous examples of cooperation with FBOs already as the previous chapter 2.3.2 summarized, there were no conceptual approaches found during the literature review on how to approach and cooperate with FBOs in the best way. It is understandable that cooperators relied on their assumptions or personal experience and insights, but this is not a scientific approach.

As the GIZ needs to monitor the impact of their projects the water and religion project received first promising results for their activities with Muslim communities in the northern region of Jordan showing that people stated to be more likely to take water-saving actions (Gable et al. 2015; Hermann, Ryan 2018). This proves that religion can be a platform to bring change in behavior and that the approach was effective, but it still does not explain or verify how it is done and whether it could be done more effectively.

Whereas the GIZ measured impacts, some scholars have tried to confirm a positive or negative correlation between the exertion of Christian rituals or the level of religiosity and a concern for the environment. Those studies all applied quantitative analytic tools survey data.

Boyd (1999) for example correlated six religious parameters – such as belief in God, literalist understanding of Bible, fundamentalism, image of God, attendance of church and frequency of prayer – with three parameters indicating concern for the environment. Arbuckle and Konisky (2015) tried to set up a similar correlation 16 years later. Their religiosity coefficient consisted of three parameters: importance of believe, church attendance and frequency of prayer. Disregarding their results – there is a research gap of a scientifically synthesized explanation why and how Christians are or are not environmental-concerned as visualized in Figure 3.

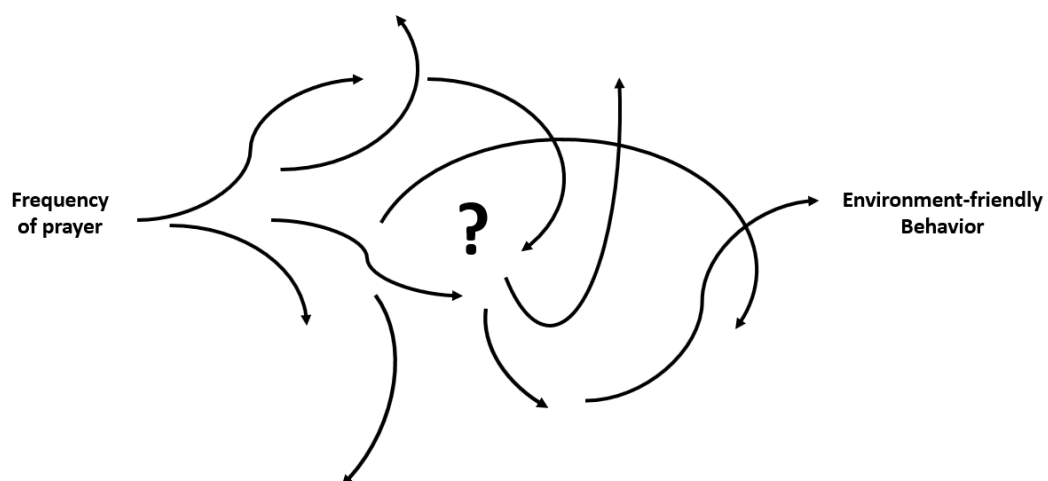


Figure 3: How is frequency of prayer connected to exerting environment-friendly behavior?

Equally, no scientific study could be found researching how faith can influence members of a religion so to adopt more environment-friendly behaviors. Konisky (2017) concluded in a later study, investigating whether there was a greening of Christianity in the past decades in the United States, that:

“Like most survey research in this area, important questions are left unanswered. For example, establishing correlations (positive or negative) between religious identity and environmental attitudes does not provide an explanation as to why affiliation with different faiths is associated with environmental concern.” (Konisky 2017)

He later on suggests that a qualitative study like ethnographic work could be a promising tool to understand how and why faith could or could not be connected with environmental concern (Konisky 2017).

2.7.Objectives of Research

Hence the research steps will be: First, develop a model to propose cause-effect-chains of Christian faith aspects and environment-related behavior, particularly water saving behavior. Secondly, the model will be verified by interviewing Jordanian Christians and thirdly the model will be modified and expanded if necessary. Fourthly other aspects influencing Christian community members regarding their engagement in environment-friendly measures are also hoped to be identified along the research process. The research will hence have a strong exploratory character. The objectives and related research questions are displayed in Table 2.

Table 2: Objectives of the Research

Objectives	Research Questions
1. Develop verified model to explain the cause-effect-chains of Christian religious influencers to environmental behaviors, specifically water saving behaviors (theoretical)	a) Do the proposed religious influencers have an impact on the <u>general behavior</u> of Christians?
	b) Do these elements have potential to lead to a sustainable, environment-friendly behavior?
	c) What are other non-religious influencers for Christians to adapt sustainable, environment-friendly behavior?
	d) What is the level of knowledge on the environmental challenges and the water situation in Jordan specifically?
2. Draw conclusions and recommendations for the work of the Water & Islam Project of GIZ (applied)	What else can the GIZ do in their project to increase the outcome? What are general recommendations for GOs/NGOs working with FBOs?

Disregarding the postulated objectives, the research might not only be interesting for the GIZ but for all GOs or NGOs cooperating with FBOs for nature conservation, increasing sustainability in communities and change individuals' behavior. The study could also be interesting for believers which want to learn about the potential ways to motivate their fellow believers for conservation. However, this research cannot generate a simple recipe of how to proceed but will rather give general recommendations.

3. Theory & Conceptual Framework

One of the most known models to explain the decision-making on behaviors is Ajzen's Theory of Reasoned Action (ToRA) which was later expanded to the Theory of Planned Behavior (ToPB).

The ToPB is a concept to explain human social behavior. By closely examining and querying the underlying beliefs of an individual about his or her world and surroundings, an internal decision making process can be explained and the behavior can be predicted quite fairly (Ajzen 1985).

The theories first will be explained in general before it shall be adapted for the case of Christian factors influencing environment-friendly behavior in general and water saving measures specifically.

3.1. Theory of Reasoned Action

Ajzen and Fishbein have postulated their ToRA in 1975 (Ajzen, Fishbein 1975). It was adapted and modified the next decade to match field-research findings. In general Ajzen and colleagues collected a great amount of evidence from quantitative research in support of the theory (Ajzen 1985).

It is a model based on the assumption that human behavior is carried out along more or less well formulated plans and that the shown behavior is generally goal-driven. Ajzen states that even habitual behavior first must be carried out on a conscious basis in well formulated plans before becoming a routine. Ajzen picks the example of a typewriter, which usage might have become habitual. Still the user has taken the decision to write a letter and hence inserts paper, strikes the buttons and so forth (Ajzen 1985). That is an important notion since most of the water saving measures are shifting on the level of habits once someone has decided to carry them out.

The ToRA assumes that the behavior is fully under the volitional control of the individual and can only explain and predict behavior properly if the behavior is truly only depending on the individual's decision for it (Ajzen 1985).

Figure 4 displays the internal behavior-performing-decision process representing the ToRA. Based on the assumptions mentioned before, a behavior first requires an intention to be carried out. For example: For a woman to have an abortion, she first needs to form this intention before carrying it out. If a certain intention is formed, it is the immediate determinant of the behavior. Intentions, however, are formed based on the Attitude and the Subjective Norms a person holds. The strength of influence of Attitude and Subjective Norms can vary depending on personal character traits and the behavior in question (Ajzen 1985).

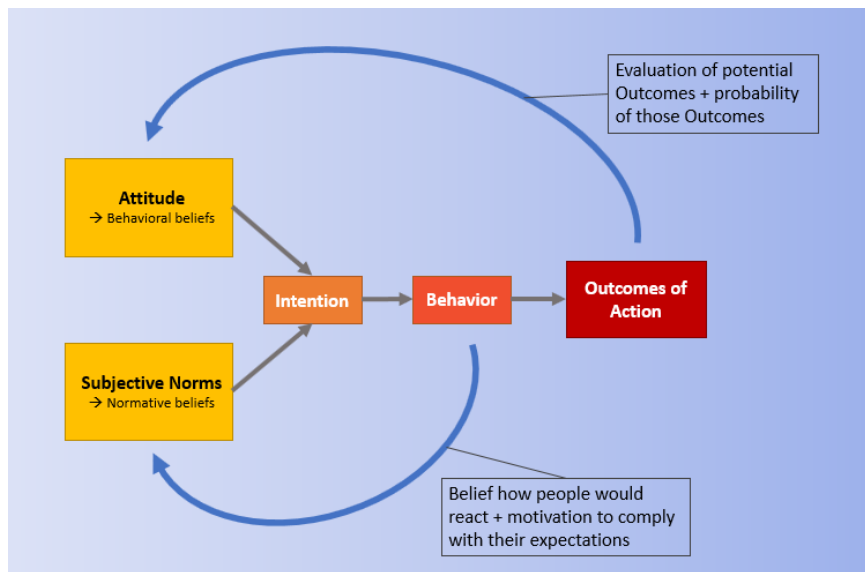


Figure 4: Visualization of the Theory of Reasoned Action by Ajzen

The Attitude towards a certain behavior is influenced first by the evaluation of the potential outcomes of a certain behavior. If the outcomes of a behavior appear to be positive, the person will be more inclined to implement the intention. The knowledge of potential outcomes and their evaluation depends on the Behavioral Beliefs a person holds about the world and his or her surroundings (Ajzen 1985). Secondly the attitude is impacted by the perceived probability of occurrence of those outcomes. A very positive outcome with low probability will probably not outweigh several negative outcomes with high probability. Hence the person will hold a rather negative attitude, will have a lower intention and therefore will probably not realize the behavior in mind (Ajzen 1985).

As Schaap and Steenbergen (2002) exemplify this notion regarding water saving behavior:

“What is the probability that this behavior will have a certain result? What value do I attribute to this result? How would the balance between costs and benefits turn out? Costs and benefits in this context are not necessarily monetary or economic but can also be related to psychological, social or religious values. So, if the total value of the most probable results of this proposed behavior is positive, the attitude towards this behavior will also be positive.” (Schaap and van Steenbergen 2002)

Apart from the “Attitude” the “Subjective Norm” is the second impactor of the intention. The Subjective Norm is firstly influenced by the perception of how the social environment would react to the behavior in question. If the individual expects that reference persons would disfavor the behavior, the intention to carry out the behavior will be less strong. Secondly the Subjective Norm is influenced by how strongly the person feels inclined to comply with the expectations of other people. It is very likely that close reference persons like family members and friends will exert a strong influence on the Subjective Norm (Ajzen 1985).

As stated before, both “Attitude” and “Subjective Norm” are nourished by convictions thought to be true about the world and are called Behavioral and Normative Beliefs (Ajzen 1985).

Initially the ToRA was to explain very important one-time decisions as abortion, having another child, taking the pill, vote in election or the decisions for or against breast-feeding. (Ajzen 1985)

3.2.Theory of Planned Behavior

The ToPB is a further development of the ToRA. Besides the already presented influencers “Attitude” and “Subjective Norm”, it includes the actual and perceived lack of control to carry out a certain behavior. This influencer is called “Perceived Behavioral Control” (Ajzen 1991). This category represents

- 1) the aspects which truly are not under volitional control and
- 2) those that are just perceived to be not under volitional control

and therefore impact the individual’s intention towards the attempt to carry out a specific behavior in question (Ajzen 1985). Overall, it represents the perceived difficulty to implement a behavior (Ajzen 1991).

For example, a woman who ponders to go jogging regularly realizes that she does not have proper jogging shoes. Whether she has the attitude that jogging has beneficial outcomes and that her social environment would support her idea to go jogging, she cannot do so. This would be a constraint not under volitional control. However, if she had shoes but then wonders if she is even fit enough to do jogging, that would be only a perceived constraint.

These aspects can be furthermore sorted in Internal and External Constraints. Whereas Internal Constraints compromise the lack of information or skills, a lack of power of will or strong emotions hindering the behavior, External Constraints compromise constraints such as time, opportunity, material or the dependence on others for carrying out the behavior.

The model of ToPB bridges hence the gap between behaviors fully and not fully under volitional control. Empirical evidences support this theory as well (Ajzen 1991) and the ToPB has been widely used for the explanation of environmental behavior motivation. A simplified graphic is shown in Figure 5.

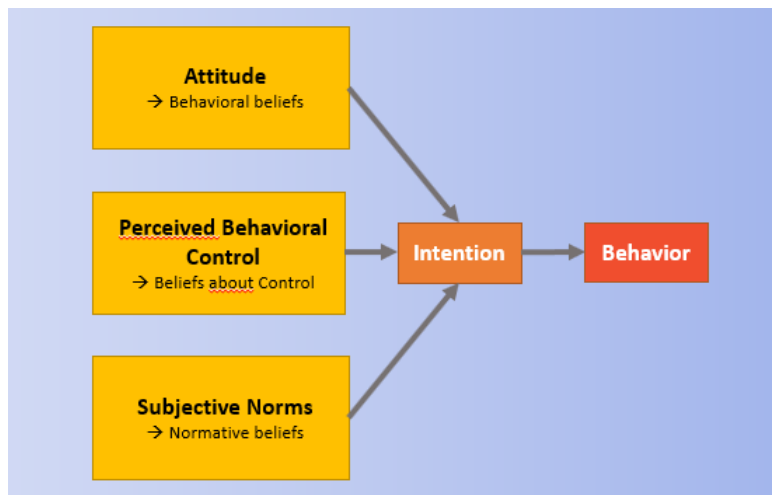


Figure 5: Simplification of Theory of Planned Behavior by Ajzen

The ToPB has been applied for all kind of sustainable purchase studies such as fair trade products (Jin Ma et al. 2012) and organic food on Mauritius and in China (Devi et al. 2012; Zhou et al. 2013). (Chang, Chou 2018) used the ToPB to investigate why citizens in Tainwan don't bring their own bags when shopping. (Yang et al. 2018) used and expanded the theory to understand the shopping patterns at big fairs.

Usually some by-constructs were added to the model to adapt it to the respective cases e.g. (Yang et al. 2018; Chang, Chou 2018). Very often, the interlinkages were quantitatively explored with survey data and statistical software. For this thesis, however, it shall be only verified that an adaptation of the ToPB is generally applicable for the case before a quantitative research can be carried out to determine the strength of the interlinkages. This is because no comparable study on the effect of religion and environmental behavior was carried out before.

The ToPB is expected to be useful for the context of the project in Jordan because

“by examining closely the underlying belief structure, one can also gain a good understanding of the factors that ultimately determine a person's decision to perform or not to perform a given behavior.” (Ajzen 1985, 1985)

Applying this statement to the case: instead of defining the contents of the elements forming intention as all the above mentioned studies did (see an example of statements in Figure 6), this study will suggest content-related interlinkages, further design open interview questions to check if those interlinkages prove to be true, and if unexpected ones emerge. By that it will be understood how Jordanian Christian's underlying belief structures of Attitudes and Subjective Norms in that respective regard forms intentions to realize water saving behaviors.

<p>Attitude</p> <p>Taking into account information related to the protection of the environment in my Double-11 purchases...</p> <p>ATT1: is favorable</p> <p>ATT2: is a good idea</p> <p>ATT3: is a positive behavior</p> <p>ATT4: is a valuable behavior</p> <p>ATT5: is a beneficial behavior</p>	<p>Perceived behavioral control</p> <p>PBC1: To me, taking into account environmental information for my Double-11 shopping is easy</p> <p>PBC2: I can, without any problem, take into account environmental information for my Double-11 shopping</p> <p>PBC3: Taking into account environmental information for my Double-11 shopping is a decision that is only up to me</p>
<p>Subjective norm</p> <p>SN1: Most of the people who are important to me think that I should take into account environmental information for my "Double-11 Shopping Festival" shopping</p> <p>SN2: Most of the people who are important to me approve that I take into account environmental information for my "Double-11 Shopping Festival" shopping</p> <p>SN3: Most of the people who are important to me think that taking into account environmental information for my "Double-11 Shopping Festival" shopping is a good thing</p>	<p>Purchase intention</p> <p>When doing my Double-11 shopping...</p> <p>PI1: I will consider buying products because they are less polluting in coming times</p> <p>PI2: I will consider switching to environmental friendly brands for ecological reasons</p> <p>PI3: I plan to spend more on environmental friendly products rather than conventional products</p> <p>PI4: I expect to purchase green products in the future because of its positive environmental contribution</p> <p>PI5: I definitely want to purchase green products in the near future</p>

Figure 6: An example of pre-formulated contents to measure the influence of Attitude, Perceived Behavioral Control and Subjective Norm in shopping behaviors at the Chinese fair Double-11 (Yang et al. 2018)

3.3.The proposed Model

Subsequently a model based on the previously described ToPB by Ajzen was developed to provide a structure to investigate about the different impacts of the Christian faith on "Attitude", "Subjective Norm" and "Perceived Behavioral Control" to carry out water saving measures on an individual level.

The adapted model contains the typical elements of Ajzen's theory like "Attitude", "Perceived Behavioral Control", "Subjective Norms", "Intention" and "Action" in the known order and meaning. Similarly to other adaptations for environmental behavior (Chang, Chou 2018; Yang et al. 2018), constructs were added to the model in discussion to represent the assumed influences of faith on the three elements. The suggested model is depicted in Figure 7 and will be adapted after the research. Potential interlinkages will be explained in the next subchapters.

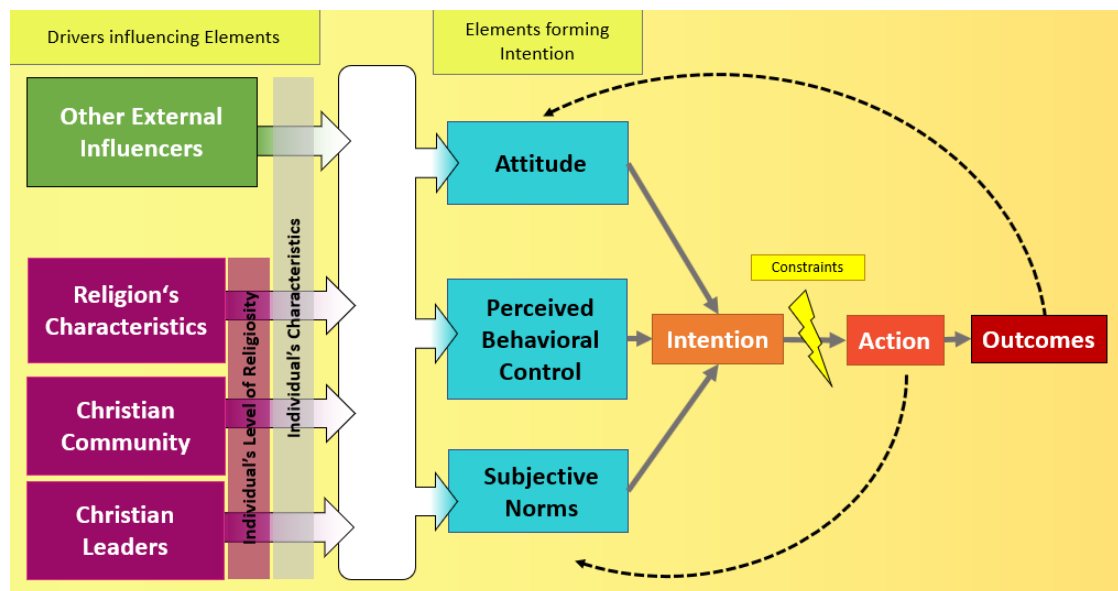


Figure 7: Proposed Model to explain the influence of faith on Water-Saving-Behavior

3.3.1. Influencers assumed to impact Elements forming Intention

In this chapter the faith-based elements shall be presented which are assumed to influence Attitude, Perceived Behavioral Control and Subjective Norm. It will also be explained why and how they are thought to influence the determinants of intention. This section will be highly influenced by argumentations found in literature but even more by the researcher's own experience and knowledge about the interlinkages between faith and conservation (for background of researcher see chapter 4.4.1 page 35). It was refined in unstructured discussions with Christian friends from Jordan, Nigeria, United States and Germany.

3.3.1.1. External Influencers

The model ultimately starts with an assumption. Irrgang (1992) concluded that the Bible does not have an environmental ethic, even though it provides a few stories and examples from which a code of conduct can be derived. The pivotal point of Christianity is not a concern for the environment. Christians must realize the problems such as water scarcity, the degradation of water habitats, the loss of fauna and flora, conflicts over water allocation, increasing costs for society, loss of livelihoods and so forth first before they find arguments why this is religiously relevant. That is why the green box in the top left corner of the model is seen as a starting place of the behavior and consciousness changing process. Here all kind of facts or givens can be included, and they can both be true or fictional. E.g. a Christian can be convinced that Jordan has plenty of water resources and that there are not problems with the availability of water.

3.3.1.2. Religion's Characteristic

This category covers all the religious belief elements. One of the characteristics of Christianity assumed to have an influence on the elements is the worldview of Christians. The purpose and value of the world, the role and position of humanity within it, the interconnection between mankind and nature, this will most certainly influence the intention in one way or another. Another factor suggested are the moral values Christians subscribed themselves to. Those could be love, compassion and forgiveness. Also, the image of God, the character, what God stands for and how people see their relation to God could have a role on the elements. People will most probably derive these convictions from the Bible, Tradition and contemporary interpretation.

3.3.1.3. Christian Community

By Christian Community all other fellow-believers whose actions, thoughts or relationship to them could have an impact on the individual's Attitude, Perceived Behavioral Control and Subjective Norms are included. The Christian Community can be divided in three spheres. The spheres are usually but not always equally close in terms of space and affection. A person living with his family might consider the family the most influential referent because it is spatially close. The idea is illustrated in Figure 8.

The inner circle of a believer is formed by the family members (if they are Christians as well), close friends and people one has contact and exchange regularly by youth groups or bible study groups for example. More time is spent with this group of people and

they probably have a strong impact by expressing their thoughts or follow through with certain actions. They act as a direct and personal source of information and experience and might even serve as role-models.

The second, outer sphere is the parish, in which a group of believers organize themselves and meet regularly for service. It is highly intertwined with the third element, the Christian leaders, which has not yet been presented. Depending on the size, the members of the parish could be more and less intimate and have similar functions as the inner circles in terms of spreading information and ideas. Bigger church communities however which congregate for service and part after it, do not provide space and time for people to exchange as for example smaller congregations, which also meet after service for lunch, and are therefore more influenced by decisions and teachings of the church leader or the group of church leaders.

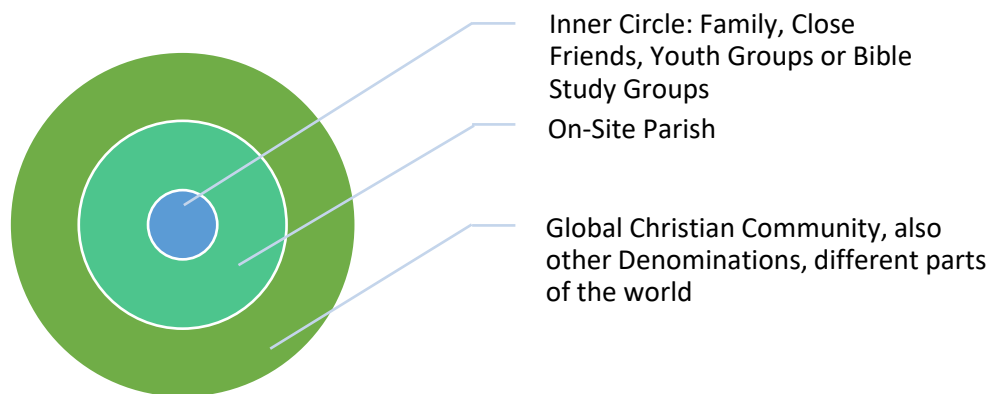


Figure 8: The spheres of Christian Community

The most external sphere consists of other parishes and denominations, which might be still located in the same country or be spread over the entire world. If this third sphere is relevant for the individual believers depends on his/her own convictions, the convictions of family, friends, of the parish and how well the parishes keep community with each other. Other parishes can act as a reliable source of information what is happening in other places. They can also inspire each other and feel responsible for each other. Of course, this sphere is very often represented by the church leaders whose role will be discussed in the next section.

3.3.1.4. Christian Leaders

Similarly, to the community, Christian Leaders might be represented on every sphere. Their characteristic is that they either have or pretend to have a certain position to lead other Christians. They act as an ethical instance, interpret Scripture and Tradition for the whole community and decide which behavior is in line with faith and which are not.

The first level could be all the official or unofficial leaders within a certain community. Those could be leaders of music team, Bible-studies, church councils or even nuns that serve the community.

On the second community level, leaders are usually the priests, pastors or simply: those who are responsible to lead the church community spiritually and administratively. The level of their influence and their role depends on denomination and how much they gained sympathy and trust of their parish.

On a global level, church leaders might be represented in one person, like the pope for example, but also in the whole church “institution”, which decides on compulsory teachings and gives advices. Individual believers might be more or less inclined to follow the teachings of a distant, impersonal institution.

3.3.1.5. Personal level of religiosity and Individual’s Characteristic

The before mentioned religious drivers can only act on Attitude, Perceived Behavioral Control and Subjective Norm, if the individual Christian considers faith as an influencer in his or her personal life. It is assumed that so called nominal Christians, which don’t have a high contact surface with their belief system, will not be influenced very much by it. That does not mean, that they might not even show more efforts to save water or have high moral values in general, but simply that the lever from the belief system is small. Adding to that every Christian might also be affected by their individual characteristics such as age and education. Both of those drivers will not be of further investigation or discussion.

3.3.2. Elements forming Intention

How can the abovementioned influencers impact Attitude, Perceived Behavioral Control and Subjective Norm to create an intention to carry out environment-friendly behaviors or water saving measures? To investigate this is the very core of this thesis. Hence, only assumptions shall be set as examples here in this chapters. During research it will be verified if those were right assumptions and what cause-effect chains were missed out in this chapter.

3.3.2.1. Attitude

Referring to the definition of Ajzen’s ToPB Attitude is a combination of the evaluation of outcomes from the behavior as well as the probability of these outcomes to happen. What are the relevant outcomes of environment-friendly or water saving behaviors? There could be three which do not necessarily exclude each other:

- a. Go to heaven, please God, do something good in God’s eyes (religious outcome)
- b. Save water and money for oneself (individual outcome)
- c. Mitigate water scarcity in Jordan (national outcome)

People might give different evaluations to each of those outcomes and there could be religious as well as external influencers for the evaluation. Adding to that also the probability of experiencing this outcome varies tremendously. Christians might not be concerned about the probability of the religious outcome since the Bible tells often that God sees our intentions, our heart and our attempt to change and do something good. The probability of b) is considerably high, but the one for c) might be lower since a huge number of other factors determine whether the outcome is going to become real or not.

But the follow-up question for the outcome a) is: Why should God be pleased when one saves water or conserves the environment? And could outcome c) not be triggered by a religious normative belief as well?

A lot of people raised as Christians still hear the passage in Genesis resonate: “I give you dominion over the earth.” The notion of God putting the natural realm at mankind’s free disposal is responsible for the current ecological crisis, argued White (1967) over five decades ago. Since then a lot of thoughts were spent on this passage and a lot of Christians interpret this passage as God entrusting creation to mankind and that people will be held responsible for it if they ruled over earth carelessly. This notion is also emphasized by the belief that earth was supposed to be God’s perfect and good creation. Every destruction can hence be seen as destruction of a precious gift from God. Religiously motivated changes in attitudes which are in favor of water saving behaviors could stress that water and the environment is a gift from God and that every living being is meant to have access to it. Some theologians as Fr. Richard Rohr go even further and speak of a “Cosmic Christ”, an incarnation of God in creation. He writes that “everything, everything without exception, would bear the clear imprint and likeness of the one Creator.” (Rohr 2011).

Other voices argue that over-exploitation of resources or destruction of habitats also destroy livelihoods of people in the worst case take human lives. Nature conservation hence is not only about conserving nature for its own sake, but because it provides a basis of life. One might think of the increasing severity of floods and droughts driven by climate change and how thousands of people lose livelihoods or lives to that every year. One might also think of one’s own children or simply the future generations which are deprived by one’s own greed or laziness of beauty, resources and a livable environment. It is assumed that Christians will not be indifferent to that argumentation.

In the Jordanian water situation other external reasons might foster an attitude that saving water to mitigate the scarcity is sensible. Conflicts about water allocation does not only affect the Jordan nation but strains the relationship to neighboring countries. Future generations are also impacted because a majority of aquifers were continuously over-exploited and ecosystems adversely affected (Ministry of Water & Irrigation 2016b). At the same time there are also totally non-religious arguments like saving money by keeping the water bill low and the projection that Jordan one day might have serious economic and social repercussions might be enough of reason for some people to have a positive attitude towards the behavior. Of course, external and religious arguments can be highly intertwined.

Religious values like modesty can also favor water saving (Schaap, van Steenberg 2002). Social showcasing can also impact the attitude: If trusted persons from the Christian community or church leaders recommend a certain behavior, individual’s might change their attitude based on the trustworthiness of other people.

3.3.2.2. Perceived Behavioral Control

Perceived Behavioral Control is the perceived difficulty to implement a certain intention (Ajzen 1991). However, for this model the meaning shall be inversed: What are religious or external drivers that could help the individual to carry out water saving behaviors? Which barriers can be overcome?

Christians might have a positive Attitude and a positive Subjective Norm that water saving is a good measure to take, but experience difficulties in implementation. Actual barriers could be a lack of knowledge, skills, finances or material. Information brochures provided by the church on how water can be saved in everyday actions could help to bridge the first gap. Usually for the most water saving behaviors no skills are required. Finances for incentivizing water harvesting could help churches or households to carry it out or material like water saving devices to change to water saving applications.

Besides that, the parish can also be an incubator for concrete and more influential actions. It can decide on equipping the bathrooms for example with water saving devices or harvest rainwater from the roof to use it for watering the community garden and hence sets an example for the individual family or believer to carry out the same.

A perceived lack of control might include a lack of power of will or a despair that one might not be able to carry through constantly with the behavior, so it is not even attempted. Role models from church can help to motivate people to not despair and show off a case for their fellow believers.

3.3.2.3. Subjective Norm

Recalling the definition of Ajzen, Subjective Norm is a combination of the subjective perception how the social environment would react to the behavior and the motivation to comply with this social environment.

In order for this element to exert an influence people must at least have the impression that their social environment requests them to carry out this behavior and the more those people are important to them, the more they will feel the need to carry it out to please them.

There could be four spheres of social realm which can exercise impact on an individual: First, it is the whole of society which Christians might feel to be watched by. The question might be for outsiders if the Christians behave according to what they always preach. The Christian Community might feel like proving the sincerity of their faith to the outside world. Christians might also feel responsible for the whole society and therefore act on what they think is expected from them.

Secondly, Christians might feel an even stronger motivation to comply with their fellow believers. If a culture of resource-sparing behavior is developed within a family, a Bible Study Group or within a church community, individuals might feel pushed to take part in the behavior. Besides that, the parish can also be an incubator for concrete and more influential actions. It can decide on equipping the bathrooms for example with water saving devices or harvest rainwater from the roof to use it for watering the community

garden and hence deliver the idea that individual's need to do the same thing in order to be not shamed by the community

Thirdly, leaders, church institutions or authorities might prescribe a certain behavior and individuals may see it as important to comply with the teachings of their church. The Encyclica *Laudato Si'* by Pope Francis can be seen as one example when religious leaders set environmental concern as a norm for Christians (Pope Francis 5/24/2015).

Lastly, the ultimate desire is to comply with God's expectations for the behavior of a Christian. For this people must first develop an understanding what God wants from them in this regard. At the same time, it might be difficult to differentiate this influence from an impact on attitude. Because a believer wants to please God so badly, he might simply take over God's attitudes regarding this behavior.

3.3.2.4. Summary of the impacts

Table 3 condenses all the ideas mentioned before on how religious and external influencers impact the elements forming an intention for water saving measures.

Table 3: Summary of the impacts of religious and external influencers on Attitude, Perceived Behavioral Control and Subjective Norm.

	Attitude	Perceived Behavioral Control	Subjective Norm
External Influencers	<ul style="list-style-type: none"> - Science points out the existence of a problem - surrounding society influencing attitude through actions or words - Economic reasons 	<ul style="list-style-type: none"> - Provision of ideas on how to save water - surrounding society inspiring, encouraging through actions and words - provision of material, finances by institutions 	<ul style="list-style-type: none"> - Surrounding society creating peer pressure to comply
Religion's Characteristics	<ul style="list-style-type: none"> - View on the natural world, God's creation, mankind as stewards - General values like modesty, humility - Care for nature is care for humans 	<ul style="list-style-type: none"> - Encouragement that the action is seen by God - Encouragement that everything is possible for the one who believes 	<ul style="list-style-type: none"> - Wish to comply with God's desires
Religious Community	<ul style="list-style-type: none"> - Actions: community or members display combatting the problem as something good - Words: Sharing of thoughts and opinions, sharing scientific facts 	<ul style="list-style-type: none"> - Members show-case action - Encourage by words - Providing help and information 	<ul style="list-style-type: none"> - Members addressing the problem by actions or words create peer pressure to comply
Religious Leaders	<ul style="list-style-type: none"> - Actions: leaders display combatting the problem as something good - Words: leaders declare combatting the problem as good, sharing scientific facts 	<ul style="list-style-type: none"> - Leaders show-case that behavioral change is possible - Encourage by words 	<ul style="list-style-type: none"> - Leaders addressing the problem by actions or words creates pressure to comply

3.3.3. Intention and Action

If the elements are strong enough to form the intentions for a water saving behavior it will be carried out. On domestic level, there are several ways to save water. Table 4 summarizes a vast but not exhaustive set of water saving behaviors which can be categorized by two criteria:

- 1) Those behavior changes which come with an actual decrease of water used for a certain application and those which do not decrease the demand for water but during which additional water resources can be provided for other uses and hence save water and
- 2) those which require merely a behavior change and can basically be adopted by anyone and those who need a certain set of skills, finances or other prerequisites to be carried out.

Table 4: Water Saving Measures which can be carried out on an individual basis

	Only Behavior Change required	Behavior Change + material, knowledge and/or finances required
Decreasing Water Demand for Application	<ul style="list-style-type: none"> • Turn the water off while brushing teeth and/or shaving • Start washing machine only when it's fully loaded • Use a bucket for car washing instead of a hose • Sweep and groom outside and inside surfaces instead of throwing water/cleaning with a hose • Use a tub/bucket to wash vegetables and dishes in the kitchen instead of running water • Take shorter showers (less than 5 min) • 	<ul style="list-style-type: none"> • Install water saving faucets for toilets, sinks, showers, etc. • When exchanging old dishwashers and washing machines, buy water-efficient ones • Fix leaks to faucets and pipes • Plant garden plants that require less water •
Provision of additional Water	<ul style="list-style-type: none"> • Collect cold water from the tap before hot water reaches (use for flushing toilet for instance) • Reuse the water of washing vegetables and dishes (for garden irrigation for instance) • Collect rainwater for irrigation (small scale) • 	<ul style="list-style-type: none"> • Install domestic grey water recycling unit • Collect rainwater for irrigation or domestic use (medium and large scale) •

Potentially, other behaviors might occur during the interview like getting engaged into politics to e.g. stop producing water-intensive crops grown in Jordan. Other environment-friendly behaviors might also be listed later.

4. Methodology

As the proposed model for explaining the impact of religion on water-saving behaviors has been already presented in chapter 3.3, the next steps need to aim to verify the model and later on adapt it, if needed. Lastly, conclusions shall be drawn from the research. This chapter introduces the methodological procedure of the research needed to cater for those objectives.

4.1. Preliminary Considerations

4.1.1. Choosing the Data Acquisition Tool

As there has been no scientific study on this topic before, the research approach needed to be qualitative and exploratory (Konisky 2017). The strength of exploratory methods is that important variables will be identified during the research process to grow a deep understanding, in that case the influence of religion on water saving behaviors. Therefore, the research tended to apply a strong constructivist worldview (Creswell 2014).

The data was obtained with interviews being inspired mainly by the methodology for Semi-standardized Interviews, but the interview guideline also included elements from Expert Interviews. Those were for following reasons:

- a) Semi-Standardized Interviews are expected to retrieve the subjective viewpoints better than standardized interviews or questionnaires (Flick 2010).
- b) In some way all the interviewees are experts since they all belong to the Christian faith and they are expert for what they believe.

Mixed-Methods Approaches would have been interesting to gather more information on group dynamics but were discarded due to a lack of time (Creswell 2014).

4.1.2. Bounding the Study

The study is dominantly taking place in Amman, Jordan. Participants in the study will be members and leaders of churches located in Amman and potentially adjacent governorates. Even though the focus will be on Jordanian citizens, interviewees with other nationalities which lived in Jordan for quite some time, will not be excluded. Members and leaders might have or not have been in contact with the project of the GIZ.

4.2. Procedure of Acquiring Data

4.2.1. Process of Establishing Contacts

The researcher gained connection to participants by numerous ways. This process also evolved in certain stages over the course of her research. An overall retrospective overview can be seen in Figure 9.

First (1), she gained connections by attending services from different denominations and participating in a Bible Study Group before the start of the research. This has already made her familiar with a lot of potential participants by passing acquaintances or even friends. Second (2), by her internship position within the GIZ she participated in workshops or supported small activities with Christian Organizations or representatives and hence she was able to make professional contacts, which sometimes shifted quickly to a personal level because of her affiliation to the Christian faith. Third (3+4), interviewees were asked if they knew about other people to interview. Especially at the end of her research, contacts were forwarded by former interviewees and people who were basically strangers accepted to be interviewed because of the trustworthiness of their friends or acquaintances.

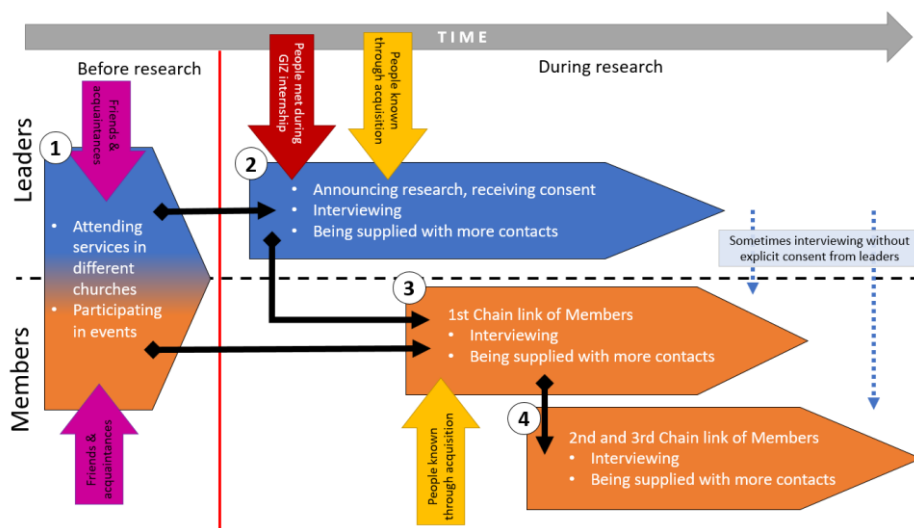


Figure 9: Overview of gaining entry to the site. Vertical arrows represent influx of contacts, horizontal broad arrows show activities throughout time. Black arrows represent the transition ways from knowing people to interviewing them

(2) Church Congregations which might present an interesting pool of people to interview but were not yet visited by the researcher beforehand, were visited in a private manner before interviewing members, if possible. Then entry to the site was sought by approaching the church leader(s). For this purpose, the researcher forwarded a letter to the church leaders containing the intention of the research and asking for permission to conduct interviews with church members. Questions which arose from church leaders, were answered before interviews. Sometimes the request for permission was coupled with a request to interview the leader as well. Leaders will be interviewed based on their level of language assessed by the researcher either during workshops organized by the GIZ, evaluated as sufficient from other church leaders or evaluation on personal encounter.

Subsequently (3), the researcher asked the leaders to suggest one or more potential interviewees. This was necessary because most interviews were meant to be held in English. It was assumed that the leaders would be more aware of who speaks fluently English among the congregation and hence facilitate the search for interviewees. Sometimes, even though it was tried to minimize the problems of expression by choosing interviewees with good English skills or providing a translator, it was noticed that some interviewees nevertheless struggled with finding appropriate words due to the hard to grasp subject.

Biases which include suggesting only interviewees which the church leaders think to be a good interview partner based on their knowledge about environmental challenges or their participation in the church community were tried to be kept low as much as possible, by stressing that only the level of English is a criterion and that the interview is not to test for “right or wrong” answers in a religious context. However, a tendency to be introduced to people who were well educated, very religious, highly involved in the church’s activities, generally pro-environmental in their attitudes or to get connected to such people by the leaders was noticed and could not be eradicated on the search for interviewees. E.g. one lady who supported her in finding new interviewees suggested a friend which she evaluated as very engaged in the topic of environmental protection and as incredibly strong in faith.

The aspects mentioned in the above paragraph also applied for (4). At the last stage of research, contacts were mostly forwarded or established by church members in a trusted position or generally by people who had already been interviewed.

Sometimes, especially for unforeseen acquaintances, it was not possible to contact the church leaders first to ask for interviewing permission.

4.2.2. Selection of Interviewees

The researcher tried to interview a variety of church members from different denominations, age groups and background to cover a wide variety of perceptions, thoughts and opinions. To meet those goals, the researcher tried to talk to as many Christians from different denominations as possible and to purposefully include only Arabic-speaking Christians. By focusing on only Arabic-speaking church members at the last stage, it was tried to access another group of people in the churches having not yet had the opportunity to contribute to the research due to the researcher’s preferences for English-speaking participants.

4.2.2.1. Denominations

A list of churches entered as locations on Google Maps in Amman (Google Maps 2019) helped to give an overview on how many churches of different denominations are in Amman. The researcher sorted them in the three below mentioned groups and tried to draw interviewees from all of them:

- Reformists: Lutheran, Protestant, Evangelical, Nazarene, Baptist, Anglican
- Oriental: Greek-Orthodox, Syrian-Orthodox, Armenian, Coptic
- Catholic: Catholic, Greek-Catholic

The affiliation to a denomination will be a descriptive factor but not an analytical one. The reasons for this are numerous: First, the small number of interviewed people is not enough to draw a conclusion how the denomination might influence behavior. A second reason derived from personal conversation before starting the research is, that Jordanian Christians very often don't mind visiting different churches in their lifetime and hence are influenced by several denominational characteristics. This was confirmed through numerous encounters with other Christians. The Jordanian Christians will hence be treated as one sample from which is drawn equally distributed. Another advantage is that anonymity can be far better guaranteed if denomination is not a factor of analysis.

4.2.2.2. Issues of Language

The researcher developed good connections to church communities in her neighborhood which she contacted first for interviews. Because she could not fluently speak Arabic, she noticed that she unintentionally created a selective sample of people belonging to the more privileged part of society regarding water supply and finances as contacting communities in underprivileged parts of the city was not easily possible. By purposefully search for only Arabic-speaking Christians she attempted to work against this natural selection of interviewees.

Beforehand, it was pondered how Arabic-speaking Christians could be interviewed. The initial idea was to have a professional translator translate the spoken in-situ and then simply code the translated part instead of what was actually said by the interviewee. However, due to financial constraints and a lack of time combined with problems of access to the target group, the procedure was changed. Door-openers in specific communities were identified and asked for help and translation. After the interview was conducted, promising passages were to be listened to together and translated word by word by the door-opener.

In four cases the interviewees were not fluent enough to have the interview in English. In one of these cases the interviewee called a relative to give a helping hand in cases when the English skills would not be adequate. In another case a Christian work colleague of the interviewee offered to help and because he was taking detailed notes during the interview a subsequent translation of what was said by the interviewee was omitted. In the other two cases, a door-opener helped in identifying potential interviews, translating the interviews in-situ and to improve the translation of the interviews. Having interviewed some only Arabic-speaking natives helped only partially as one of three was giving very short answers due to tenseness.

Two interviews featured not only the opinion of the interviewee, but the translator as well or someone who was joining the conversation.

4.2.3. Procedure of Acquisition

In all the cases phone numbers were exchanged or forwarded by either speaking directly with participants or receiving the numbers from church leaders or acquaintances. In general, the application “What’s App” was very often used as a digital communication tool. The approach included often an introduction by the researcher, sharing the research purpose and the digital version of the Declaration of Consent as well as if neither of those points had been an adequate topic in a face-to-face discussion. If the potential interview partner agreed, an appointment was arranged.

It was also noticed that in order to gain the trust of the interviewees more details about the research topic had to be revealed or explained when contacting. Some people requested to know the topics being discussed. To respect the rights of the interviewees and to keep the good contact, this was always followed. From experience, the researcher assumes that the influence of revealing more information about the research purpose was very low on the interview.

In general, people were quickly willing to be interviewed. The researcher assumes that this was partially due the researcher’s affiliation with the same faith and the personal connection made in services or other events or the trustworthiness of people having forwarded their contact details. However, due to the focus of the interview on religious topics, the researcher realized that she usually talked to very religiously active persons while others felt that they were not religious enough to be suitable for the interview. For example, one potential interviewee declined the interview with the justification that she would not be such a strong believer. This relates to the warning of Flick (2010) for expert interviews: That some potential participants might decline the interview because they feel they are no experts.

Places of interviews were very often the churches’ facilities, private homes or in rare cases public places.

4.2.4. Forging the Interview Guideline and Asking Questions

Because the researcher did not have much experience in conducting social research, she first interviewed English-speaking people so to gain enough experience to know which questions are most relevant for the study before downsizing the interview-guideline for Arabic-speaking Christians with whom the process of interviewing and translating with a third person was even more difficult and time-intensive.

When pre-testing interviews and when talking to people privately, it was realized that the average Jordanian might not know very much about environmental problems. This perception also resulted from the researcher’s own subjective interest in environment protection and the cultural upbringing. Consequently, it was tried to shape the questions in the interview guideline in a way people will have an easy access to the topic and by predefining the issues (focus on water). Apart from some unstructured, open questions that were applied first to avoid giving direction, most of the questions were semi-structured (Flick 2010).

Furthermore, it was noticed from private discussions that Jordanian Christians are worrying about several troublesome topics which seem to them more of weight than the threat the pending water crisis poses. To give those concerns room and to not pass over them, a specific question was dedicated to those concerns. However, this question was omitted in a later version of the interview guideline because people would often talk about these issues by themselves without being asked, yet they talked quantitatively less about it.

Initially, the researcher developed two interview guidelines with tailored questions for leaders and members. The idea was to ask leaders more theological questions than the members. However, in two cases she questioned leaders with the interview guideline for members by mistake and in the end the differentiation did not seem of importance anymore and did not contribute to the analysis. Apart from that, the interview guideline underwent several stages and minor adaptations throughout the research but generally was designed in the following way:

1. Questions about faith in general
2. Questions about knowledge on water scarcity/environmental challenges and interviewee's actions on those problems
3. Questions testing the connection of faith and environment for the interviewee

After some introductory questions about the age, family situation, profession and religious affiliation, the first set of questions were solely concerned about perceptions about the own faith, followed by open questions about religious influencers on behavior in general which specified more and more to the end of the section and becoming semi-structured questions. This was done to not impose the direction of the research too early on the interviewees (Flick 2010). It was noticed that the focus of the interviews had shifted over time to religious characteristics and away from the role of leaders and the community. This was corrected after the first 5 interviews.

The next set of questions was designed in a more fractured way. First it was asked about problems and challenges in society in general (this question was omitted later), then about problems related to the environment. This question was omitted later as well for the sake of focusing the interview on one topic and because it was noticed that people did not talk much about this topic. Finally focusing on the water situation and what interviewees knew about those problems and how they think they could be tackled and whether they tried to do so in their own life.

Next, people were asked whether they could see a religious reason to tackle those issues. Hence slowly the topic of religion and faith was drawn back in. Depending on how the interviewee positioned himself/herself to the idea of the connection between religion and environmental concern, the questions were adapted, changed, deepened or asked in reverse order. It was experienced that this third part of questions was usually not answered orderly, but the researcher tried to connect to what people already had said and hence keep a good interview flow as Hopf (1978) recommended not to apply the interview guideline too rigidly. Sometimes not all questions were asked

because they appeared to be obsolete after a certain statement from the interviewee or because they were partially answered en passant. In few cases this was also done to not exceed the time too much.

If possible and appropriate, interviewees were confronted with viewpoints collected from the literature or previous discussions in interviews to pose a confrontational question to examine notions of interviewees under the perspective of competing arguments (Flick 2010). Of main importance was in that case the idea of dominion over creation, destruction of the perfect creation due to Fall of Man and the future consummation at the Last Day. Consequently, not every interviewee talked about this topic. The interview guidelines for both leaders and members can be studied in Annex chapter I.

Some interviewees were asking at some point during the interview if the researcher was satisfied with the answers given. This was usually interpreted as discomfort with the questions and that people were wondering if they were not talking about the wrong topics due to the very vague and broad topic dealt with.

As it is one of the common problems in expert interviews, it did happen sometimes that people lost themselves in long monologues rather than waiting for the researcher to ask the next question. The researcher, however, due to her lack of experience in interviewing also wanted to stay as polite as possible and rarely interrupted to bring the interviewee back to the right track.

Flick (2010) warns that by designing semi-standardized interviews with open questions, theory-driven questions and confrontational questions, the interviewees might gain the perception of being under a test. Asking about particular aspects of faith could add to this perception. This was dealt with that stressing right in the beginning the non-testing character of the interview and keeping a positive mood if people felt they could not answer questions sufficiently (see chapter 4.2.1).

According to Flick (2010) there are four dimensions that interview guidelines should try to cover: The first pair is Non-Direction and Specificity, the second one Range and Depth. Those elements are opposing each other but not contradicting. It depends on the researcher to apply different type of questions to cover all four dimensions.

Whereas the dimension of Non-direction was well met during the research the dimensions of Specificity was neglected. The interview guideline was oriented to not push participants in giving answers that they felt the researcher would like to hear, but to give much freedom. This was at the expense of Specificity as the researcher noticed in the process of analysis that interviewees didn't talk specifically about their concrete actions regarding water saving or protection of the environment. As Flick (2010) says, achieving this balance depends on two factors: The course of the interview and the training and experience of the interviewer. As this study was the researcher's first qualitative, social-empirical work it is unlikely to meet those requirements straight away. The balance between Range (covering all topics) and Depth (receive self-

revelatory statements) however was quite well. The Depth was achieved due to the trust of interviewees in the researcher being affiliated with the same faith.

4.3. Methodology for Analysis

To track the argumentation line from the influencers to the elements and from the elements to the behaviors, it was necessary to transcribe and code the interviews and using the intersection of codes for the analysis.

4.3.1. Transcription and Coding

The interviews were recorded with a microphone, subsequently transcribed and coded with the software MaxQDA (VERBI GmbH 2019). The transcription was partially done in between interviews and hence first insights were gathered, potentially influencing the next interviews. Codes were partially introduced beforehand such as the codes relevant and anticipated for the faith-model. Others were developed during the process of coding. After coding the about 50% of the interviews, the codes were assessed, restructured and adapted to the theoretical framework. At the same time coding definitions with examples of sayings were set to assure a consistent coding process. However, the coding underwent still another cycle of adaptation when approaching the analysis. An important code category had to be split up and another one was added.

Due to several changes, a lot of interview material and lack of experience in the coding process in general, certain inconsistencies were noticed in the analysis which proceeded. E.g. it was noticed that the element "Subjective Norm" that was intersecting with "Creation" was not actually meant to indicate that "Creation" was the cause for the "Subjective Norm" but actually "God" that was always coded very close to "creation" and unintendedly intersecting with "Subjective Norm".

Similarly, there were code constellations showing an interconnection, but when reading the passage in detail the "Influencer" was the one receiving an impact by the action and was not the cause for the action. This was mainly because interviewees would not go through the cause-effect-chain one by one, but addressing several drivers, their influence on the interviewee and the impact on the outside world at the same time. Those deficiencies were respected in the analysis verbally. An example of the transcription and the coding can be found in Annex chapter III page 122.

The final logic of the code tree is to represent the logic of the model proposed. There are code categories for the external and religious influencers, code categories for the elements forming intention and for the behaviors as can be seen in Figure 10.



Figure 10: Code Tree of MaxQDA Project File

It was decided to code only for Attitude, Perceived Behavioral Control or Subjective Norm if the interviewee experienced those elements influencing his or her intention and not to code it if the interviewees reported how their actions impacted those elements of someone else.

During transcription and coding spontaneous conclusions and remarks to statements of participants or the analysis process were recorded with the memo tool of MaxQDA (VERBI GmbH 2019). Some important statements were also weighted to find them easier later for retrieval.

Retrospectively the researcher noticed that she rarely requested the interviewees to talk about their activities to show their concern for the water situation or environment in Jordan, but that the focus of the interviews usually shifted back the religious convictions. That showed in the analysis as a very thin representation and interconnection. This was due to three reasons:

1. Initially the approach was to cover the meaning of all religious and external aspects and then continue to the elements and subsequently the behaviors.
2. Since both researcher and usually interviewee enjoyed talking about the religious topics, much more time was spent on them with regular shifts back
3. The trend was realized too late. After 50% of the interviews the interview guideline was changed slightly to focus more on community and leader part of the religion but still not asking a specific question about the behaviors.

That is also one of the reasons why the number of codings of the category “Convictions, Worldview, Role” are more than for “Community” and “Leaders”. As the interviewees mostly talked about the behaviors in the conjugative tense and their religious justification there was no room for incorporating a real influence of community or leaders.

Some interviewees monologued. The researcher out of a strong feeling of politeness and being inexperienced in interviewing, did only interrupt after some while. This resulted in long passages being left uncoded as they were not useful for the actual research.

Initially the researcher also aimed at analyzing the interviews from leaders and members in a different way which later was omitted. Since the interview guideline are structurally very similar, only adapted slightly to the leader or member and asking more theological questions to the leader, the differences only add another aspect to the topic. But since most of the members were quite religious and well educated in religious terms it can also be assumed that the differences are marginal.

4.3.2. Cross-Table

To track the argumentation line from the influencers to the elements and from the elements to the behaviors, it was decided to use the cross-table function in MaxQDA. This function depicts the frequency of intersections either by number or by symbol sizes. It is an interactive tool in which the code category's subcodes can be expanded or collapsed and new insights be gathered. It is a typical qualitative research method since trends and patterns can be identified easily (Creswell 2014).

For this research the cross table was applied in the following way: When an interviewee mentioned the influencer for holding a certain attitude, subjective norm or perceive behavioral control, then the two codings would intersect and show on the cross table. The cross-table was set to count direct intersections only.

When subsequently retrieving the passages of the most dominant intersections, it can be described and generalized how the drivers exerts influence on the various elements forming intention. However, it was also found true that Semi-standardized Interviews provide a lot of data for each single case and that it will be difficult to generalize statements. (Flick 2010)

Another difficulty was that a) not always did interviewees mention their influencers along the way speaking about the elements for their intention and b) that initially everything what was concerned with e.g. the government was coded under "government". Later it was noticed that if the same passage was also coded with e.g. "Attitude" that the cross table would automatically show this intersection even though the government might not have been an influencer but rather it was part of a general statement and the government had no impact on Attitude. This was corrected as best as it could be done.

4.3.3. Code Maps

A tool to illustrate the cross tables is the code map in which the frequencies of intersections are represented spatially. The closer the codes are the more intersections were found and the code map forms a cluster. The lines illustrate the frequency of intersections which is helpful to identify the connections between clusters.

4.4. The Researcher

4.4.1. Background of Researcher

The researcher has grown up in Germany, has been raised protestant, however decided to let herself be baptized in adolescence in a Baptist Church, Germany. In that time, she attended the weekly services, joined community gatherings as well as discipleship courses and even got involved in service preparation. About two years ago she opened for Catholic practices, viewpoints and ethics. Ever since she enjoys the variety of Christian services and tries to understand the practices of Christian people from different denominations. When in Jordan she visited any kind of service like for example Baptist, Orthodox and Catholic and had acquaintances as well as friends from a lot of different Christian denominations.

Since the researcher mostly spend time in her friend's circles in the Western part of Amman, she mostly had contact with people being more privileged in terms of water supply and finances, even for the interviews. She realized during the research that she does not have a good comprehensive understanding of the status of water supply in other parts of the city or the country and how people need to deal with the water. The conviction that people generally are not concerned about their water consumption only applies in good certainty for the social circles she had access to. This view was also shaped by generalizations in news and reports. This perspective however determined parts of the interview guideline. It was an unexpected result that most people had basic knowledge about the scarcity and were not indifferent to it.

4.4.2. Biases and Conflicts of Interest

One bias was the researcher's affiliation to the Christian Faith. The researcher brings understanding and knowledge about Scriptures and is familiar with the meaning and symbols of common church rituals. However, this also influenced the course of the interviews as mentioned before. She might interpret the data she finds in a certain way according to her previous experience instead of having a fresh look (Gajaweera, Johnson 2016). However, her affiliation also provided a lot of contacts. She felt that people were opening up quickly and telling her also very personal things. That proves that

“the investigator's contribution to the research setting can be useful and positive rather than detrimental” (Locke et al., 1987)

Another source for bias is the interest of the GIZ team to have a positive outcome from the research for their project that did not play out as such. It was the researcher who approached the GIZ to conduct the research because of her interest in the topic. She was paid a monthly internship's salary during the months of the internship (February until June) by the GIZ headquarters, but not throughout the subsequent time of preparation of the master thesis. The researcher felt that she was granted much freedom to research and to shift the focus of the research as she and her academic supervisor consider best.

A third source of bias was the researcher's own interest in the topic of water saving since she studies Integrated Water Resources Management. Also growing up in a culture of general high environmental awareness posed a bias that revealed itself in the way she didn't receive the answers she expected.

4.4.3. Role of Researcher in the Research

The researcher will be the main tool for the data acquisition by interviewing participants. Being an official intern in the GIZ from mid of February until mid of June, offered opportunities to the researcher to contact Christian Leaders cooperating with the GIZ in the same topic as her research. Hence, she experienced a kind of conflict initially: There was the chance that participants viewed her as a GIZ-affiliate and representing the goals of the company. Truly, she did represent the GIZ to some extent. However, she experienced her research growing more and more independent from the project of the GIZ, because her professional supervisor gave her much intellectual freedom and interviewees did not ask many questions about the GIZ.

4.5. Ethical Considerations

Ethical considerations include that the researcher was required to respect any form of belief or viewpoints she would be encountered with. As a researcher affiliated with the GIZ, her position within the GIZ and the GIZ's interest were tried to be disclosed as transparent as possible. Not only because she represented the GIZ to some extent, she persuaded good relationships with everyone interviewed so not to compromise future cooperation, but maybe even help foster them. Especially since she realized that some church members have not encountered the project before she distributed some informative material about the GIZ's work with Christian communities.

The rights of the interviewees during and after the interview will be recorded by a consent sheet to be signed by the participants. This sheet was distributed to potential interviewees before the interview to give time for reading, if possible. For only-Arab-speaking Christians the Declaration of Consent was translated in Arabic. Once an interviewee refused to sign, because of concern that the content of the interview could be traced back to him. The Declaration of Consent is added to the Annex chapter IV.

During the process of transcription names of people, places and institutions are anonymized so direct quotations published in the thesis cannot not be traced back to any church, denomination or interviewee. Hence, interviewees cannot be confronted by anyone for their views and opinions and no denomination can be put in a "good" or "bad" light by anyone.

In very rare cases interviewees showed concern about specific pieces of information revealed in the interview. Those concerns were discussed after finishing the interview and it was proposed to black out certain passages in the transcription additionally to anonymizing the transcript.

Even more because the interviewees will not receive a direct benefit for their participation in the research, the thesis will be made accessible to every participant who requests it.

Interview recordings will not be shared with anyone. Anonymized transcriptions might be requested by other researchers for validation of thesis. If the complete transcription ought to be used for another research by other researchers, it is only possible if interviewees give their consent, dependent on their consent to be contacted again after the interview.

Because phone calls, text messages and digital communication applications are not only widely used, but the number one communication tools and because most people are not concerned about privacy in Jordan, this was not considered a problem of ethics for the research. However, it was taken care not to forward the numbers to any other interviewee or to talk about the contents of the interview with the person having forwarded the number or established the contact.

5. Data Description

First, this chapter shall deliver a short overview over the sample of participants such as age distribution and denominational belonging. For the interviews the dates and lengths will be presented. After that follows the description of codes.

The description of codes shall be oriented after the structure of the model and the code tree (see Figure 10 page 33 for an overview). The descriptions give a summary of the text passages distributed to the respective codes. By tendency the longer a description chapter the more was said by the interviewees about this topic. Categories that had only few codings were omitted from description. What is written down does not need to reflect the truth, but it is what people knew or felt true for themselves.

5.1. Interview Details

All in all, a total number of 15 interviews was conducted over a period of four months from February 2019 to July 2019, whereas the majority were conducted in the month of May and June. Five interviews were about 40-45 minutes long, five interviews 60-75 minutes, and the rest of five interviews 75-100 minutes whereas the longest was prolonged by major disturbances during the interviews, such as phone calls and other people engaging the interviewee in a conversation (see Table 10 in Annex Chapter II page 121 for details).

The gender distribution of the interviewees was balanced with 7 female and 8 male participants. The age distribution and the variety of denominational belonging are depicted in Figure 11 and Figure 12.

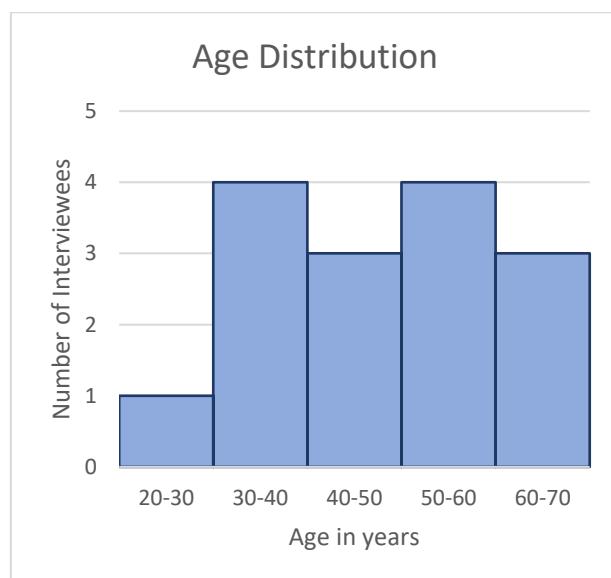


Figure 11: Age Distribution of Interviewees

It shall be noted that some interviewees stressed that they belong to two different denominations, either due to preferences or their partner being from another denomination.

Four interviewees were actual leaders like pastors or priests, four members had leading position within the church in Bible Study Groups, Youth Groups or similar activities. The rest of seven interviewees made no remarks about holding special responsibilities in the church community.

Apart from two interviewees, all were Jordanians. One of the interviewees was American, the other one Egyptian. Both spent equal to or more than 10 years on Jordan or the Arabian Peninsula.

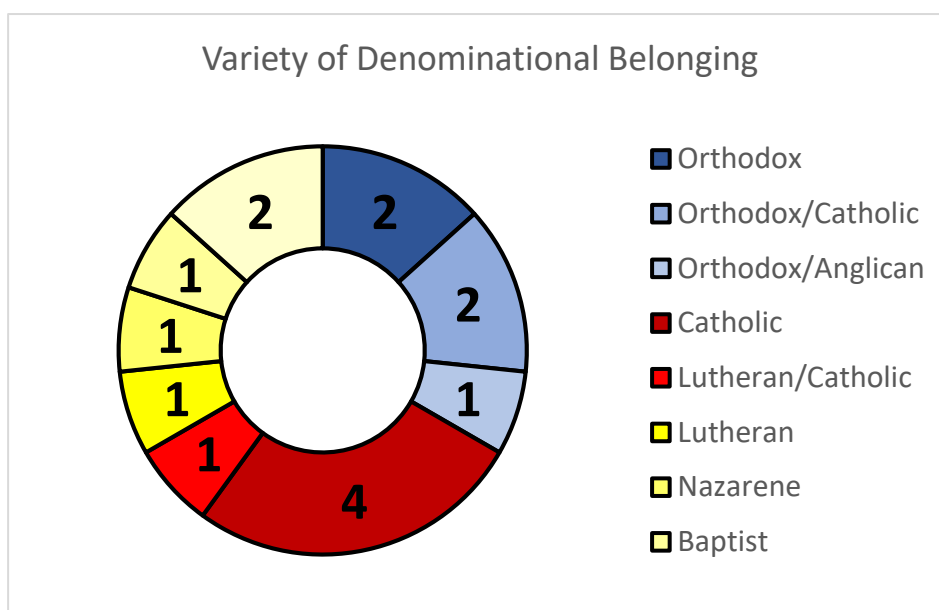


Figure 12: Variety of Denominational Belonging

5.2. Religion's Characteristics

In advance of the next subchapter it shall be noticed that the content of the subcodes for the code category "Religion's Characteristic" is highly intertwined. For example, "God" is often mentioned simultaneously with "Bible". The following excerpt illustrates this in which the interviewee indirectly quoted Matthew 10,29-30 to derive a character trait about God:

"[God] cares about sparrows, he cares about.. he knows plains of grass, he knows numbers of hair follicles [...]." (Interviewee 2 on 4/1/2019)

There are numerous other examples as also the codes "Creation" and "God" were often coded together. This leads to high doubling and the phenomenon of high intersections in this code category alone which will emerge in the analysis section chapter 6.

5.2.1. General Convictions & Worldviews (generally and faith-related)

During the interviews a huge amount of diverse but rather general opinions and convictions emerged. A core belief people mentioned over and over is the existence of a God, that took human form and was called Jesus, that this God's most important attribute is love and that he loves every human person no matter of religion, gender or nationality.

Christians hence should believe in this God, the salvation accomplished by Jesus' sacrifice on the cross and that he was resurrected. A good number of interviewees stressed that of most concern for a believer is to have an intimate relationship to this God. If a person enters this relationship, as a lot of interviewees described the process of believing, one's life starts to change. Religion is not a set of rules but realizing that one is in relationship with that God, but also with other people (Interviewee 2 on 4/1/2019).

Another notion mentioned often was that God has given people freedom to make choices which humans out of pride abused. This explains both the Bible's narrative from the Fall of Man and the on-going problems in the world including the disproportional exploitation of nature. Some stated that something is broken inside the humans which can only be fixed by surrendering to God (Interviewee 3 on 4/16/2019; Interviewee 8 on 5/18/2019).

All interviewees agreed that their faith was part of their identity, their foundation to build their life on and that they could not imagine how to live without having faith. They saw that their belief engaged all aspects of their life which was often expressed as God always being with them. A few of them stressed that the faith was not to be put off after going to service but an all-life-transforming element.

"The Christianity... is about, eh, lifestyle. Okay? .. We.. It's not a book .. It's not .. eh, only on the church .. it's not.. ehm.. only by praying but.. it's.. it's a thing inside of us that motivate us to do the right thing in every way. And in everything in our life. We can't say that I am Christian only on the church or only when I'm praying and I am not Christian in the life. Okay? In the, eeeeeee, society where I am work, okay? I am Christian everywhere and .. ehm... it's, it's my identity. Okay? To be Christian is my identity." (Interviewee 15 on 6/26/2019)

5.2.2. God

When interviewees talked about God there were following aspects talked about most:

1. God as being to God of love that predominantly revealed himself in Jesus.
2. Jesus as the incarnated God and the savior of mankind was mentioned in all interviews as the role model, teacher and inspiration for deriving how to behave as a Christian. His words and actions are of high weight for a believing person.
3. God being the creator, author and authorizer of all life that He sustains constantly.
4. God's presence in or besides the believer. The way participants talked about the topic it was clear that they felt God is always with them.
5. God gave and still gives gifts, blessings or provisions. Because they are given by God, they are very precious.
6. God as the ultimate purpose of all the believer's actions. Everything in a believer's life should be dedicated to him.

“Each thing you do, everything you do in, in your day.. it has to be for God. Like, if, if I serve the patient ... I don't serve him for only to get money and to get my salary, I serve him because I love Jesus .. and I want to serve this patient .. for Jesus'.. sake.” (Interviewee 10 on 5/30/2019)

Apart from those constantly reoccurring major themes there were several smaller ones as: God being the provider of strength, hope, financial and materialistic blessing, God being tangible and visible through other believers, God being the ultimate friend for a Christian, but also the judge. God's character traits like forgiveness and justice were mentioned, as well that God is calling people to do certain tasks.

5.2.3. Bible

People see the Bible as holy, sent by God or Word of God. From those attributes most of the arguments derived the importance of the Bible and why to obey it or at least respect and honor it. Indeed, every interviewee mentioned the Bible.

The Bible supplies people with a worldview, defines the very core of their faith which helps them to orient themselves and understand what is happening around them and why it's happening. It lays a filter over the world in which people see God acting and redefining what the actual reality is, yet invisible. The Bible is the divinely revealed truth

1. about God and His character
2. about the world and its meaning and purpose and
3. about the identity and role of mankind in regard of God and creation

These revelations give meaning to everything people experience and hence imply consequently a Code of Conduct. Following quotation stresses this interconnection:

“Scripture, I believe is, is ... what God has revealed about himself, about the world, about people. And it reveals what His standard is. Ehm, so Scripture .. tells me what I should and shouldn't do. Ehm, not in a .. not in a lawbook kind of way, ehm, there are some specific .. you know, clear items, don't do this, don't do this, but what Scripture does is it tells me how to be in relationship [with God and people].” (Interviewee 2 on 4/1/2019)

People also mentioned the creation story from the Bible regularly. From that story they interpreted the role of mankind in God's creation, as being image bearers, agents and helper of God.

However, interviewees had different perspectives on the Bible. Some exalted the Bible as holding the ultimate authority by which all people had to measure themselves. Those participants commonly described the Bible as stable, more trustworthy than people and as the most important, ultimate source of inspiration of God, and hence to be followed obediently; even more obediently than whatever people say and may it be a leader in church (Interviewee 11 on 6/1/2019; Interviewee 2 on 4/1/2019; Interviewee 6 on 5/7/2019; Interviewee 8 on 5/18/2019).

Others differentiated that the Bible is one of the most important sources for religious life, but not the only one and that the Bible needs to be interpreted by the “church” (what is meant by “church” will be discussed later). Furthermore, they opined that not all passages in the Bible are easy to understand and that the Bible always needs to be subject to reasoning, thoughtful interpretation and not to be understood literally (Interviewee 3 on 4/16/2019; Interviewee 4 on 5/4/2019).

Some stated that they don’t like to read the Bible, yet the mentioned it often as a source of ethics (Interviewee 4 on 5/4/2019; Interviewee 7 on 5/9/2019). One person clearly distinguished her personal beliefs from not being in line with the Bible teachings though saying that the Bible would be worth of respect:

“I believe that another that. This is, eeeh, eeh, in the Bible, I respect the Bible, I love the Bible. I ... but I don't think that will happen in the last day. I don't think, it's, this is my opinion and this is what I thinking. Eh, #that# eeeh, the God is more, ehm... eeeh, #merciful# [...], I don't think this is, in there, there is #hell or heaven#, no. Even I am Christian and the core of be Christian to believe that in, eeeh, eeeh, paradise and hell. I don't think that.” (Interviewee 7 on 5/9/2019)

Lastly, the Bible is an object of study and reason for communal gatherings to read and construe. Some interviewees also mentioned an intergenerational aspect; that they remember their parents reading the Bible to them and they continued this tradition with their own children. When reading, people reported that they experience this process as influential, comforting, encouraging or relaxing.

5.2.4. Creation and Mankind

Christians define the purpose and value of physical world and their place within that world mainly from the creation narrative in the Bible. Accordingly, mankind is created by God as the image bearer holding a special place within creation as the agents of God and crown of creation. The physical world is a place for mankind to thrive in, to be sustained by it and be its habitation. Creation, the physical world created in a very good way, hence is a gift of God handed over in the hands of mankind.

However, the interviewees also picked up the story of the Fall of Man as an event that destabilized the whole creation so that the world humans experience now is in a broken state and not as it was intended by God. Some interviewees mentioned the notion that creation suffers from the sin of mankind and the caused distortion.

When the time allowed, the interviewees were confronted with another story from the Bible: the “World’s End”. The very first interviewee shared the opinion that the physical world mankind lives in is a temporary place that God eventually wants to destroy:

“Well, my theory, or at least my point of view in this regard is God eventually wants to destroy this place. Cause it's something temporary. Sooo, eeeh.... When you say that God wants to preserve this place, eh, ... Judging from the ... natural disasters I've seen, from the wars... I don't think that God wants this place to stay much longer.” (Interviewee 1 on 2/21/2019)

The rest of the participants could not pinpoint how exactly this “world’s end” would look like and what exactly would happen with the natural realm God had put in place in the beginning. However, they cleaved that there would be a restoration, a renewal when God or Jesus would come back to judge all the people according to their belief in a God and according to their actions. By this time, God would remake the “old world” and restore it to its former state without sin (Interviewee 2 on 4/1/2019; Interviewee 3 on 4/16/2019). Some participants noted that the Bible would describe this remaking with pictures of destruction but that they interpreted it as a fundamental change to happen (Interviewee 3 on 4/16/2019). Some argued that creation though broken did matter to God and that he would not destroy it indifferently to bring something brand new (Interviewee 4 on 5/4/2019). Still one other stated that she would not believe in a literal Judgment Day at the End of Times, but that this process basically takes place continuously when the believer feels God confronting the behavior of the believer throughout the day (Interviewee 7 on 5/9/2019).

Finally, one said that in the Bible that creation itself longs for the return of Jesus so that there will be no destruction but even more beauty because creation has been freed from the sin of mankind (Interviewee 3 on 4/16/2019).

5.3. Community

In the process of coding it was noticed that interviewees as well as the interviewer were using the terminology “church” loosely. Both parties assumed that the other one would understand what was meant by this terminology and most often it was; but still it is a vague term. It holds not only different meanings but often refers to several at the same time. Whenever people were also not clear if they were referring to a certain group of people within the community, the whole community or the leading organs of the community, the passage was also coded as “church” which comprises following meanings:

- 1) the actual building in a specific place that is usually the place of service and prayer.
- 2) the institution. “the church” is also an institution of a certain denomination in which believers trust in. In the context of society, it is also a simple entity like any other organization is.
- 3) a community of believer, a living group of Christians gathering for services, sharing time together, their attitudes, believes and actions. Often one could assume that even leaders are included in this terminology. It is also often used when explained what role believers should play in the society.

- 4) The notion that the community of people is more than just an organization, a group of people or a building. People also spoke of “the body of Christ”, to intimate there was something godly about it. One interviewee for example stressed over and over that he sees Jesus inside of the people of the community (Interviewee 12 on 6/8/2019).
- 5) a moral connotation to the term, when interviewees talked about “the church” teaching them do’s and don’ts and interpreting the Bible.
- 6) Lastly, “the church” represents a certain belief system, a dogma which is handed on the believers. In that regard some noted that they felt the church is doing an inadequate job in teaching the believers the cores about their faith (Interviewee 11 on 6/1/2019).

5.3.1. Community

5.3.1.1. Family

When interviewees talked about how they felt that their family influences them in a religious way, they talked about basically two aspects:

First, a lot of them experienced their family as the donor of their faith. They had been baptized a Christian in a specific denomination and most of them feel brought up by their family in one way or another (Interviewee 3 on 4/16/2019; Interviewee 5 on 5/6/2019; Interviewee 6 on 5/7/2019; Interviewee 9 on 5/29/2019). Some remember being read from the Bible by their parents or grandparents, having experienced other elements of religious education and were taught what is good or bad for a Christian to do.

Whereas some felt that their parents were very religious and passed that onto their children, others just mentioned that they remember their family going to church and did not specify more about it in the interview (Interviewee 15 on 6/26/2019; Interviewee 11 on 6/1/2019). Few stated that their family didn’t give them a religious education or did not derive from the Christian faith what is recommendable to do for their children, one even experienced hostility of family members towards religiosity (Interviewee 10 on 5/30/2019).

Secondly, and in dependence on the first point, interviewees experienced (and some do still today) their families as a group of role-models to teach, to show or to inspire them how to translate the faith into actions. The family can be a place of discussions and where faith is lived out. Some see the family hence as an incubator for change.

5.3.1.2. Local Congregation

Interviewees didn’t mention the local congregation too often, especially not as an influencer. Participants talked about different groups within the local church community such as Youth Groups, Bible Study Groups, spiritual lectures, Sunday School for children, prayer gatherings, choir, meetings, conferences or other ecclesial meetings they know about or attend regularly. Especially the Youth Groups and the Bible Study groups are attended often, and the Youth Group seem to be active within the local community in organizing extra-ecclesial activities or events.

However, some stated that they did not attend very regularly or no group at all (Interviewee 14 on 6/21/2019). Service hence is their only contact point with other community members.

Those attending some group within the community often referred to the church as forming the “Body of Christ” or their second family. In these groups people also mentioned that they talk about non-spiritual topics such as politics as well and that the group was a place of discussions with their friends.

5.3.2. Leaders

5.3.2.1. Leaders within church

According to interviewees leaders within church can be preachers, elders or members of the church council, leaders in the worship team, in the youth group or in Bible studies. Nuns were mentioned most often as being an example and their choice of lifestyle as something to be contemplated about. However, it was as good as never mentioned how exactly people felt influenced by them.

5.3.2.2. Leaders of the church

It must be noted that leaders of congregations have similar functions as those within church, but their standing is seen differently by interviewees. People usually replied that the leader’s job is to teach the members of the congregation about their faith, including explaining dogmatic issues and giving lectures about specific religious topics. Preaching was also listed.

In some denominations however, leaders are also responsible to administer the sacraments like confession and communion. A leader described his function very much as being always ready to serve the needs of his congregation:

“So, eeh.. here is the, the main thing is to give the sacrament for the people, any sacrament, the.. the Mass, the baptism, confirmation, Holy Communion, the confession, okay? Any time they ask for us .. to.. for the sacraments we, we should be ready for them, to give them, the sacraments. And, eeh, we are also invited to do some meetings, conferences about the .. the faith, about any subject they asked us to .. to the, the .. the conference for [the] members in church and the .. the activities in church, the, like the youth, the Scouts, eh, choir, any, any, anyone .. who ask us to .. to have the meeting with us, so we should be ready. And.. we visit the families here in, in the parish.”
(Interviewee 15 on 6/26/2019)

Leaders might also be responsible for visiting families, counselling, encouraging and advising. Three interviewees even mentioned either the leader of the church or the leader of an affiliated church to be their spiritual father (Interviewee 10 on 5/30/2019; Interviewee 13 on 6/13/2019; Interviewee 5 on 5/6/2019). They tend to him on a personal but spiritual basis, seek his advice, receive recommendations and feel a strong support and guidance from him. Those spiritual fathers are often described as having an extraordinary faith.

Interviewees also stated that not all the leaders have a good relationship to the community, which was dependent on the community size, the availability of leaders but also the practice of bounding between leaders and members.

Yet, also regular leaders of specific denominations are usually addressed with the word “Abuna” meaning “Our father”. This stresses his leading position as the head of the congregation. One interviewee even described the leader of the congregation as the personification of Jesus because of the service and love he delivers to the congregation (Interviewee 12 on 6/8/2019). It was not only one leader who described his position as coming with huge responsibility because leaders are be looked at as examples in their behaviors. However, some participants also stated that even though they respect their leaders they would not choose them as ultimate examples or as ultimate source of inspiration.

Apart from their moral role and leading position in the church community, leaders often also have an administrative role, organizing the ministries, groups, being the contact person and having the final say in decision-making.

5.3.3. Religious Teaching or Activities on the Environment

Apart from the project carried out by the GIZ and being known to some participants, most interviewees stated that they have never or rarely heard teaching on the environment within their own church community or other church communities. Two of the leaders, however, said that they give some teaching on the environment occasionally but usually not specifically on water issues (Interviewee 6 on 5/7/2019; Interviewee 8 on 5/18/2019). One leader admitted he never had the chance to give a sermon about this topic, yet he reported to confront environment-unfriendly behavior taking place outside the usual religious church community’s setting:

“I had, eehm... eeh, three or four.. situation like this . When I saw someone.. eeeh, eeh, throw out the rubbish in the street, okay? I.. I came to him and .. and I ask-, ask him: Did you know or do you know that .. eeeh... throwing out the rubbish.. out, okay? in the street or in the nature, is a sin? .. They were surprised. It's sin? Yes, it's sin!” (Interviewee 15 on 6/26/2019)

Only one lady being around 60 years old told numerous stories when she heard leaders either talking about water issues in church, appealing to the church community so save or share water, spreading information by organizing lectures and confronting wasteful behavior.

“When [the leader] was there, he used to talk about that problem (3: What did he say?). He said for example, once when the water was cut off in the [area of Amman], he said: Share your water with others! It's not right that you have so much water and your neighbor does not have. (3: That happened when the water was cut off, but usually do they talk about saving water?) No, no, not always, it depends on which priest is talking, because there are specialized people.” (Interviewee 9 on 5/29/2019)

Another laic lady was very much committed in a monastery community which practices environment-friendly behavior in all kind of aspects.

Even though teaching on environmental topics was rare, most of the participants had a religiously condemning connotation to wasteful behavior, calling it “haram” or “sinful”. Sometimes they recalled that when they were still young their parents used those terminologies (Interviewee 1 on 2/21/2019; Interviewee 7 on 5/9/2019; Interviewee 3 on 4/16/2019).

Some already had or heard about an elaborate concept on the jointure of religion with environment-friendly behavior, talking about “stewardship” or “environment theology” (Interviewee 3 on 4/16/2019; Interviewee 5 on 5/6/2019; Interviewee 6 on 5/7/2019; Interviewee 8 on 5/18/2019)

5.4. Other Religious Influencers

Besides the obvious and expected influencers in the Christian faith such as “Convictions”, “Community” and “Leaders”, interviewees mentioned also other sources of inspiration. It shall be noted that some of those unexpected sources were talked about a lot by one or two interviewees only whereas the rest did not even mention them once. Hence some of this chapter’s content is highly individualistic.

Among the most stated resources were the life biographies, writings and teachings of saints and church fathers. In that regard the Orthodox church was discovered to have stories of saints doing miracles regarding water and drought as Saint Sabbas (Interviewee 13a on 6/13/2019; St. Sabbas the Sanctified Monastery in Jerusalem 2002)

Another source of inspiration and teaching is represented by all kinds of public institutions, such as the Catholic Media Center, Jesuit Center, Caritas, Mother Theresa Center and monasteries. Those are reported to offer either spiritual teaching or even lectures on non-spiritual topics, even water saving was mentioned (Interviewee 9 on 5/29/2019). A monastery was talked about intensively by three interviewees and they stated that this monastery taught them a lot about environment-concerned behavior (Interviewee 10 on 5/30/2019; Interviewee 13 on 6/13/2019; Interviewee 13a on 6/13/2019).

Generally, some people also found great inspiration for their spiritual life in other individuals which they perceived as very religious or even holy, such as monks, nuns and spiritual fathers and to which they had close spiritual relationships (Interviewee 10 on 5/30/2019; Interviewee 12 on 6/8/2019; Interviewee 13 on 6/13/2019; Interviewee 5 on 5/6/2019; Interviewee 9 on 5/29/2019).

Others mentioned media channels, such as Christian TV channels, books, movies and music inspiring and helpful for their life (Interviewee 1 on 2/21/2019) whereas some found their childhood at religious schools as an influential time for their personality (Interviewee 9 on 5/29/2019)

Some people also felt inspired and affected in their behavior by the supernatural. Attending prayers and visiting services, having time to reflect, hearing conversion stories, having dreams, visions or strong emotions was reported by all interviewees in one way or another to influence their attitudes, subjective norms or even actions.

5.5. External Influencers

Interviewees listed various non-religious influencers on their own or when requested to list some.

5.5.1. Broader Governmental, Societal, Economic Issues

Among all different types of influencers the governmental or societal aspect was one of the biggest. The issues talked about can be split up thematically but were difficult to sort them in subcodes in MaxQDA, so they all were coded as “Broader Governmental Societal Economic Issues” (BGSE):

5.5.1.1. International Politics

All interviewees mentioned the politics outside of Jordan as one of the major aspects influencing the Jordanian society. Wars in Syria, Iraq and Palestine, the related refugee waves, increasing religious extremism and on-going conflicts in the West Bank leave the Jordanians no little breather to rest.

5.5.1.2. Economy

Just as important as politics is the economic situation. Every interviewee named the weak economy accompanied by a high rate of unemployed people and few financial resources in general as a major challenge for the Jordanian society.

5.5.1.3. Culture

Interviewees named the tribal belonging within society as a reoccurring and most dominant aspect of how culture influences behavior.

5.5.1.4. Governmental

All the interviewees named corruption as the number one governmental influencer on the people’s intentions and behaviors. Related to that is the impression that the people responsible in government and governmental institutions are not doing their jobs adequately or that they would only care about themselves and not the overall country. Speeches are done but no action is to be seen.

5.5.1.5. Mentality

A good number of participants deplored that the average citizen is not a patriot of the own country and that there is no societal belonging meaning that people differentiate strongly between own and public property (Interviewee 3 on 4/16/2019; Interviewee 8 on 5/18/2019). Whereas people take good care of their personal belonging, they even more neglect the public goods.

Related to that interviewees complained about the habit of Jordanians to not take proper care of their waste, to regard recycling as something silly or to use water excessively as soon as it's their turn to have the water supply. Two interviewees judged the people as generally lazy to think beyond their own garden fence and as irresponsible to make something good from the resources they received (Interviewee 4 on 5/4/2019; Interviewee 10 on 5/30/2019).

5.5.1.6. Education

In general people described the educational level in Jordan as insufficient, especially in places outside of Amman, but stressed the importance of education for society's advancement.

5.5.1.7. Societal

A lot of interviewees listed not only the poverty inside the country as a problem but much more the discrepancy between a very rich, privileged part of society which has more access to resources and very poor amount of people having no say in decision-making. These groups are also said to be spatially divided. The participants often depicted the rich as abusing their financial power to consume wastefully.

5.5.1.8. Christians within society

Participants mentioned that more and more Christian citizens emigrate because they feel as a minority which is disadvantaged within the Muslim society. Examples are that Christians are not offered the same job opportunities and that they are more affected by corruption as their Muslim counterparts. In the same time Christians perceive themselves as being in the crossfire because they feel obliged by their faith to be honest and faithful in their work but by doing so always drawing the short straw. That's why Christians also tend to go with the flow and just adapt to the surrounding which mourned one of the leaders:

"Eeh.. [the Christians'] role in the.. in the society is to be the light.. , okay? of the world and.. to be different. And sometimes we have to move against the world. Okay? And, ehm.. here, [the Christians] are .. they're getting tired of .. eeh, being against the world. They're getting tired of being different. Okay? Eeh, here, when they go out.. they said to us: >>Father, if we don't.. if we don't act like them, okay? we will have nothing in our life.<< Okay?

This means... ... being, like, participating also in corruption? Or?

Yes, corruption.. infidelity.. eeh, to lie, to steal.. whatever, okay? To cheat, okay? Because this is our society, our side. And .. everyone-, every time they want to be different, okay? they .. they, they lose their friend, okay? And.. they.. called us "the weak people". Okay? Because we forgive each other, because we are.. eeh, in the right.. eeh, path in our life, so, because the life doesn't .. work like this. Okay? And .. they are afraid to, to, to act and to live like this, eeh, and sometimes.. they, they feel that God is away from them, okay?" (Interviewee 15 on 6/26/2019)

5.5.2. Environmental Issues

When either confronted with the question what environmental challenges people see in Jordan or when interviewees were talking freely about the topic the responses could be sorted as below:

The environmental problem people were most aware of was the pollution with garbage in public places whether in the streets, in parks or reserves. They held two problems responsible: Firstly, Jordanians don't recycle or try to reduce their waste and secondly that they don't dispose their waste properly but just throw or leave it wherever they are.

"She thinks the most .. harmful thing that happens to nature from humans is that when .. here in Jordan specially, when everybody goes on trips, they leave all the garbage behind .. left and, like, it comes near to trees, like, that's why." (Interviewee 14 on 6/21/2019)

Other environmental topics emerging in descending importance were climate change, water and air pollution, one participant referred several times to the SDGs and related reports (Interviewee 5 on 5/6/2019), biodiversity loss, floods, fires, earthquakes and transportation.

Participants looking at environmental challenges from a Christian perspective talked about how nature made them reflect on God, that changes and degradation in climate and environment made them ponder whether the End of Days is drawing near, that leaders confronted polluting behavior and that they also tried to address it at Youth camps. One interviewee stated that he thought the major problem is the thoughts pollution not the environmental pollution.

5.5.3. Water Issues

All the participants agreed that water is essential for life, that water is scarce in Jordan and a lot of them heard that Jordan is one of the scarcest countries regarding water resources. However, people knew very little or only a moderate amount of details about the water situation like the origin of the water, how much water is used by which sector in the country and the state of the aquatic ecosystems for example. Some named the shrinking of the Dead sea and its causes namely the deduction of water from Lake Tiberias and the Jordan River (Interviewee 4 on 5/4/2019). Some interviewees mentioned the Disi Aquifer as one of the resources for water and some gave the impression to follow the news on the yield of rain in winter and storage levels of dams (Interviewee 8 on 5/18/2019; Interviewee 6 on 5/7/2019).

Another aspect which was mentioned by most interviewees was the insufficient water supply for some areas especially in the summer months. People reported about pressure drops that led to only half-filled rooftop tanks (Interviewee 8 on 5/18/2019).

“But, eh, in general we don't have enough rain .. that's why.. ehm, for e-, most of the ... places in Jordan has water only once a week for one day, so we fill our tanks.. eh, water tanks and we use .. as much as we can, some people .. they run out of water, sometimes we have problem of pressure so we actually in some weeks, especially in summer, our tanks is not actually, eh, receiving water.” (Interviewee 8 on 5/18/2019)

Interviewees also doubted the drinking water quality of the faucet water (Interviewee 2 on 4/1/2019; Interviewee 11 on 6/1/2019). All the interviewees also reported about water wastage they had seen around Jordan when people were cleaning outside floors and terraces or washing their car for example. Again, rich people were said to be very wasteful because they could afford to have a tanker coming to bring extra water (Interviewee 8 on 5/18/2019; Interviewee 12 on 6/8/2019).

Most of the people stated that all the Jordanians know about the water scarcity in Jordan, only some conjectured that the awareness among the population for the water situation is not high.

“People know that there is water crisis .. or, eh, sensitive situation? But.. they simply use water as if we have.. plenty.” (Interviewee 8 on 5/18/2019)

The others explained the water wastage seen in public signifies that people simply don't care or don't take it seriously even though there would be a lot of discussion in the media. Some thought that people would just be mentally occupied by so many other things.

“It's not that people don't know, it's that people .. as I said, aren't taking it seriously until ... they ... they see the effect of not having it, eeh, on a regular basis. Eeh.. because sometimes when .. water does not reach the certain area, then, eeh ... I ... a while ago there's certain areas .. all over, over the news that didn't have water for a couple of weeks and then they're .. making a big deal out of it.” (Interviewee 6 on 5/7/2019)

Even though all the interviewees stated that the water is scarce, one part of them expressed an overall satisfaction with the water supply. Some noted their impression that since the water was pumped from Disi aquifer that water supply had improved (Interviewee 4 on 5/4/2019). They didn't feel restricted by the amount of water received. One said that even if there was a shortage, she could still use the service of tankers for a backup (Interviewee 11 on 6/1/2019). The other but smaller part of interviewees had experienced more shortages or were afraid that the water might run out any time (Interviewee 9 on 5/29/2019; Interviewee 8 on 5/18/2019; Interviewee 14 on 6/21/2019). Some reported about the people's strategies in underprivileged areas or even from their ancestors:

“And she says that most of the f-, families in her cities are doing the same. They are really short in water and they're trying to save water as much as possible and at the same time they're trying .. to keep water at their homes as much as they can. Because .. they don't have like ... stable source of water in their city.” (Interviewee 13 on 6/13/2019)

Few mentioned the possibility for increasing conflicts about water resources in the Middle East (Interviewee 3 on 4/16/2019; Interviewee 4 on 5/4/2019).

5.5.4. Other external influencers

5.5.4.1. Personal life's principles

Some interviewees also formulated some principles after which they structured their life and took their decisions accordingly. The most relevant are formulated below:

- ⇒ Do whatever you want to do, but don't harm others (Interviewee 3 on 4/16/2019).
- ⇒ If everyone contributes on a small level, the overall society will change (Interviewee 6 on 5/7/2019).
- ⇒ The environment is not only for one person, but it's for everyone (Interviewee 4 on 5/4/2019).
- ⇒ If you make only person a day happy by what you do, you will have 365 happy people after one year (Interviewee 5 on 5/6/2019).
- ⇒ You need to do what you believe, and I believe I must take care about everything including the environment (Interviewee 10 on 5/30/2019).
- ⇒ The fundamental problem of humanity is not the environmental pollution but the thoughts' pollution (Interviewee 12 on 6/8/2019)

5.5.4.2. Family and Friends

Some participants stated that their friends and family affect their behavior in a certain way by discursing about diverse topics. Some mentioned that they had been taught by their family to use water sparingly.

5.5.4.3. Other Religions

Few interviewees stated that they felt also influenced by the surrounding Muslim belief system manifesting itself in cultural norms. Others stressed the fraternal and similar aspects of both religious communities and that all were equal because all belonged to the same God even though the religious practices differed on the outside. Regardless the religious belonging everyone is a citizen of Jordan. Furthermore, it was said that usually all religious leaders are respected.

5.5.4.4. Others

Besides all of what was written participants mentioned some other existing influencers for behaviors e.g. the use of media and awareness campaigns (Interviewee 1 on 2/21/2019). People also commonly used simple comparison to convince people about the reasonability of environment-friendly behaviors (Interviewee 4 on 5/4/2019; Interviewee 7 on 5/9/2019). Others were moved by considering the future of coming generations or their own children (Interviewee 8 on 5/18/2019). Some also mentioned ethics or morals as a driver for behaviors (Interviewee 1 on 2/21/2019).

5.6. Elements for general Intentions

The description of the code category “Elements” will not be as extensive as the “Influencer” Code-Category because a) it would be mostly a synthesis of the latter and b) anticipate the analysis of the next chapter in writing. Hence, it was decided to give a more methodological overview of what was coded as “Attitude”, “Perceived Behavioral Control” and “Subjective Norm” and elaborate the content-wise details in the analysis chapter 6.

5.6.1. Attitude

Text was coded as “Attitude” when participants stated either a desire, an agreement on or an idea of how they thought they should behave. Often this was going along with the verbal expression “should”. This description is very general since the attitude can relate to a variety of behaviors and outcomes as not only attitudes to water or environmental behaviors were coded.

Recalling what was already said in chapter 3.3.2.1, for the environment-related attitudes people could express their attitudes in regard of different outcomes they anticipated. Those were often not explicitly named but could include something like:

- Save water for own benefits (individual level)
- Mitigate water scarcity in Jordan (national level)
- Maintain environment for coming generations (future directed)
- Please God or know God better (God-directed)
- ...

In the following are presented five statements both general and environmental-related, which were coded as “Attitude”. It shall be elaborated a little bit why they were coded as “Attitude” to give an idea about results of the coding process.

1. *“So, I think we have to start such measures for example at least to protect the life of others.” (Interviewee 3 on 4/16/2019)*

This statement shows that the interviewee has the attitude that every action which leads to a protection of the life of other is good or important. Hence, he would do or support the action in question if it would lead to the desired outcome: protect lives.

2. *"So, we have to love each other, to love our enemies, to love, eh, everyone and, ehm, we have to respect everyone because everyone is human. Everyone is, eh, is God's son or God's daughter." (Interviewee 4 on 5/4/2019)*

The attitude of this participant is that he should show love to every human being. He states the motivation for his attitude, namely a religious conviction. This participant did not clearly state the outcome of this action. Is it to please God? Is it make Him happy? Is it so other people feel comfortable? Or to keep the society at peace? This quotation includes the notion that people could favor certain behaviors just because they were told that those are right to do.

3. *"For example, if we made something wrong, they used to punish us by writing, they didn't use to hit us or make us suffer. That's what made us love them more and made us close to them and to become like them." (Interviewee 9 on 5/29/2019)*

This statement reflects on the reason why a lady felt inclined to follow the behaviors of their teachers when she was still a child and gained the attitude whatever her teachers did was something good to follow.

4. *"Eh, when I met him, I felt that I want that again, I want to go back to church and .. I felt that I want to talk to him." (Interviewee 10 on 5/30/2019)*

This example is an unusual way of how an attitude can be formed. The attitude would support any kind of behavior that would result in getting close to the church community again. The attitude was formed by an encounter with a person.

5. *"If we do not work, eh, hard on.. stopping this, eeh... eeeh.. degra-.., degradation of, eh, the nature .. we will face like floods or fires or earthquakes or people being killed by the pollution." (Interviewee 5 on 5/6/2019)*

This last statement is very nice to unwrap: The degradation posing a threat for human life is forming a positive attitude towards any behavior which would combat the pollution. The outcome would be humans' lives being protected.

5.6.2. Perceived Behavioral Control

As for Ajzen's definition, the "Perceived Behavioral Control" includes everything that adds to the perceived difficulty to carry out a behavior in question. For the sake of easiness, the coding was used in both directions for general intentions, both constraining and enabling. For the environment-friendly or environment-unfriendly intentions the meaning was only used in the inversed way: Something which was perceived as enabling a certain behavior. Again, some examples shall exemplify the usage of the coding:

1. *"If [] in my, in work there is leakage, usually my colleague just leave that until somebody .. find, stumbles, from the maintenance department. Stumbles, stumbles upon it, I used, I started to actually closing the one, despite the fact that might .. make me wet. I closed it and then I called the maintenance myself." (Interviewee 1 on 2/21/2019)*

In this quotation, the interviewee reported an incident on work when he got active to close a broken faucet. Whereas his motivation is not stated in the excerpt, one can identify a constraint for the action: making oneself wet. Nevertheless, he carried through with the action.

2. *"Especially when we go to some places, the rich people in some areas, because they have-, whether they have big wells in the hou-, in, in, under their houses or.. because.. they don't mind to keep.. calling for tanks to pay for water tanks to come and fill their .. ehm... eh, houses' wells or whatever so they use it, they use it a lot." (Interviewee 8 on 5/18/2019)*

This next example cannot be directly identified as a Perceived Behavioral Control and is not a typical one in the sense of Ajzen, because the knowledge about other people wasting water does not hinder another person to carry out the behavior. The meaning of this coding was hence stretched. Why was the meaning stretched and not refrained from coding? Because depending on the outcome one has in mind of a behavior (e.g. contribute his/her part to mitigate the water scarcity in Jordan) the knowledge about a very wasteful part of society could demotivate people as such that they don't carry out the water saving actions.

3. *"She was not raised in .. eh, rich family, eeheh, eeheh, she was not rich, so... eh, she taught to ta-, she had to take care of every drop of water, electricity, that's it. So, she lived it .. and she had to .. to practice it .. in many periods." (Interviewee 9 on 5/29/2019)*

The last statement portrays limitation of resources as a force to carry out resource-sparing behavior. The person was not having the possibility to behave differently, so her intention to waste the water was close to zero.

5.6.3. Subjective Norm

Text was coded as "Subjective Norm" when people mentioned an experience or perception of exertion of power of third entities on their behavior in one way or another. This can mean verbal support or disagreement of third parties or how they felt people looked at them when carrying out a behavior. Because a believer holds God true as a vis-à-vis, God's suppositional expectations were also coded as "Subjective Norm".

1. *"[God] has given me this creation ... to use and to manage in such a way that it meets the needs of the people that he has put into it." (Interviewee 2 on 4/1/2019)*

Some might argue God is not a person and could not exert influence on the Subjective Norm. But for the believer God is very much real and hence has a position like a human person to condemn or praise certain behavior especially since God is also described as all-seeing, all-knowing in Christianity. Consequently, similar passages were coded as “Subjective Norm”.

2. *“I know but like, maybe my parents or the people who are, like, wiser than me, like, eh, my, my, like, eh... my leaders in the Youth or eh, in the church or in the university or in the school, especially that they are, like, wiser than me.” (Interviewee 4 on 5/4/2019)*

This participant listed several people that would have a say in correcting his behavior or leading him in the right direction if there was a situation when they spoke up to him.

3. *“I know ... some, eeeeh... some people they didn't [...] eat anything if they didn't have meat or chicken or fish in... >>This is not eat, eh, I will not eat. It's not food. It's a snack. << Really!” (Interviewee 7 on 5/9/2019)*

A Subjective Norm could also be exerted by cultural norm people tend to follow. The thought that people always expect meat for meals could be purely subjective, meaning that it does not even need someone to complain about a meatless dinner, but the thought alone might influence people in their behavior.

5.7.General Behaviors

Basically, every action people mentioned during the interview could be coded as “General Behavior”. Hence this code category covers all kind of different actions which should not be discussed any further due to its lengthy and hardly sortable content.

5.8.Environment-friendly Behaviors

The category of environment-friendly behaviors mentioned by interviewees can be divided into two sections: water-related behaviors and all other environment-related behaviors.

People reported about diverse water-saving measures, the most common one checking on the closure of faucets when not needed. Other measures were:

- Use washing machine only when full
- Capture cold water before hot water reaches for showering
- Broom surfaces before cleaning with water
- Washing cars with bucket and cleaning cars rarely
- Usage of water saving devices or water-efficient machines
- Use bowl for washing dishes or for cleaning in the house

Some interviewees also reported that they taught or talked to other people about water-sparing or environment-friendly behavior. Very often mentioned was the teaching of children in this regard. One teacher stated that:

“Sometimes, eeh, in my school, sometimes I talk to the student: Don't let the .. the water open. Just .. drink and, eh, wash your hand and close it.”
(Interviewee 11 on 6/1/2019)

Leaders mentioned that they occasionally preach about environment-related topics or that they organize lectures for the communities to attend (Interviewee 15 on 6/26/2019; Interviewee 6 on 5/7/2019; Interviewee 8 on 5/18/2019).

For general environment-related behaviors one participant mentioned that they keep their trash inside a bag in the car and not throw it from the window (Interviewee 15 on 6/26/2019). Especially one interviewee was very active in all kind of environment-related aspects and reported about taking her recyclable materials from her trash at home to a recycling center, takes left-over food from the restaurant, collects used clothes and toys for needy persons and even implemented recycling of paper and cardboards at her work:

“For example at work. .. [the employees] didn't, eeh, understand what is about, what's recycling. And they don't want .. to do recycling that .. [...] we have special bin for papers. We have a special bin for garbage. [...] So.. at the beginning.. they didn't like it. And they were throwing the papers in the garbage and I was: >>Why this is here?!<< I can do change at work because I am the boss. So, and I will that and at the beginning they didn't, didn't understand and then after they understood what I'm doing and why .. they started to change and they started collecting, even this, eh.. cleaning lady. At the beginning she.. wasn't sure what she was doing and after, eehh .. after she understood wh-, why I do that and where, where does that go.. eh, she started helping me.” (Interviewee 10 on 5/30/2019)

Some interviewees also mentioned that they would talk to other people. It is reasonable that those actions had an influence on their fellow's behaviors but since those people were not interviewed a coding of those segments was omitted as it would have been a vague interpretation. Nevertheless, those parts were coded as “Action” as the interviewee took action to reach a certain goal.

“Even I am, eehh, when go to, eehh, sometimes go to my car with my, eehh... ehm, eehh... son of my brother with me in car, ask him to not to .. trash from the window, please. In this bag. Eh, this is what we , we, we, eehh.... eh, talk and let the... our sons to think.” (Interviewee 7 on 5/9/2019)

6. Analysis of Data

In the previous chapter all the codes were introduced, and their overall content distilled and summarized. The coming chapter their numerical distributions and correlation shall be analyzed by using Visual Tools provided by MaxQDA (VERBI GmbH 2019).

*Note: In this chapter only, attitude will be abbreviated with **A**, perceived behavioral control with **PBC** and Subjective Norm with **SN**.*

6.1. Numerical Distribution

Figure 13 depicts the overall numerical distributions of codings in their very general code categories. It shall be kept in mind that the category “Religious Influencers” (all purple) has three codes which split up in over ten subcodes in total of which are fanning out in the right pie of Figure 13. Similarly, the code category **A**, **PBC**, **SN** (blue) which cover both general and specifically environment-related elements of intention is structurally extensive, but fewer in number compared to “Religious Influencers”. The “External Influencers” (green) category takes is about 20% of all codings and actual behaviors (red) mentioned by the interviewees just about 5%.

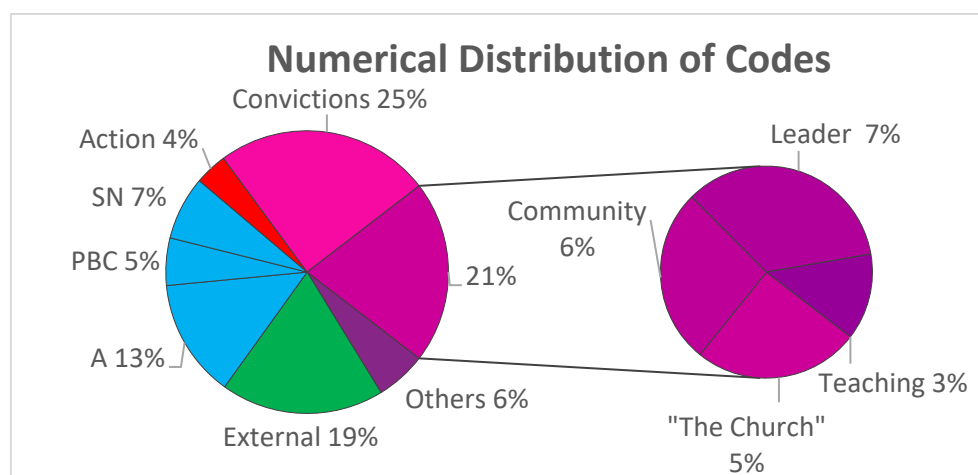


Figure 13: Numerical Distribution of Code Categories

The numerical distribution illustrates that the focus of the interviews was on the left side of the model, especially on the religious part, whereas the translation from elements forming intention to actions is underrepresented. Because of this underrepresentation, it was necessary to sort the elements forming intention manually in three different categories, because otherwise influencers which lead to an undesired action could have not been identified:

1. Elements forming intentions for general behaviors
2. Elements forming intentions for specifically environment-friendly/water sparing behavior
3. Elements forming intentions for specifically environment-unfriendly/water wasteful behavior

The total number of codings is about 2,400. A complete list of all codes can be inspected in the Annex chapter IV. The codes are sorted categorically.

6.2. Impact of Influencers on Elements forming Intention

One objective of this thesis is to answer how people describe the influence of religion on their daily behavior and on specifically environment-related behavior. According to Ajzen, people first form an intention to carry out a certain behavior which consists of three intention-forming elements: a) The attitude towards the outcome of the behavior, b) the perceived difficulty to carry out the behavior and c) the anticipation of how the social environment would react to that behavior. Those three elements themselves are being influenced by numerous possible ways.

For the specific case of this thesis the assumptions on how the correlation of religious influencers, external influencers and elements of intention work out are described in chapter 3.3.1 on page 17 and consequently will be verified with the analysis. It shall also be analyzed first what roles the Religious Influencers play in the process of forming the elements of intention for general behavior. However, it will not be analyzed how external influencers impact the intention for general behaviors, as the code category basically is summing up the elements for all kind of general behaviors that were mentioned by the interviewees. The analysis will be presented, results summarized and highlighted in the upcoming chapters.

6.2.1. Impacts of Religious Influencers on Elements forming general Intentions

The Cross Tables depicting the intersections of the codes of “Religious Influencer” and “General Intentions” can be studied in Figure 25, Figure 26 and Figure 27 in chapter OVI of the Annex.

When studying Figure 25 it can easily be identified that the most important religious influencers for the intentions of general behaviors are:

1. General Convictions ~ 85 hits
2. God ~75 hits
3. Bible ~75 hits
4. Other Religious Influencers ~65 hits
5. Leader of the church ~60 hits

Furthermore, it can also be distinguished that all the influence concentrate dominantly in **A** for carrying out a general behavior (~270 intersections). **A** is foremost charged with “General Convictions”, “Bible” and “God” (however not with “Creation”) and “Other religious Influencers”, whereas distinctive parts of the community only play a minor role. If “The church”-category is collapsed, it has about as much intersections as the subcode “General Convictions” as can be seen in Figure 26.

PBC and **SN** have about 90 and 120 intersections with religious influencers respectively. They are influenced by about the same driver “Leaders of the church”. Additionally, the **SN** is also influenced slightly more by “Other Religious Influencers” than the **PBC** as accentuated in Figure 27. Figure 14 summarizes these results as a code map.

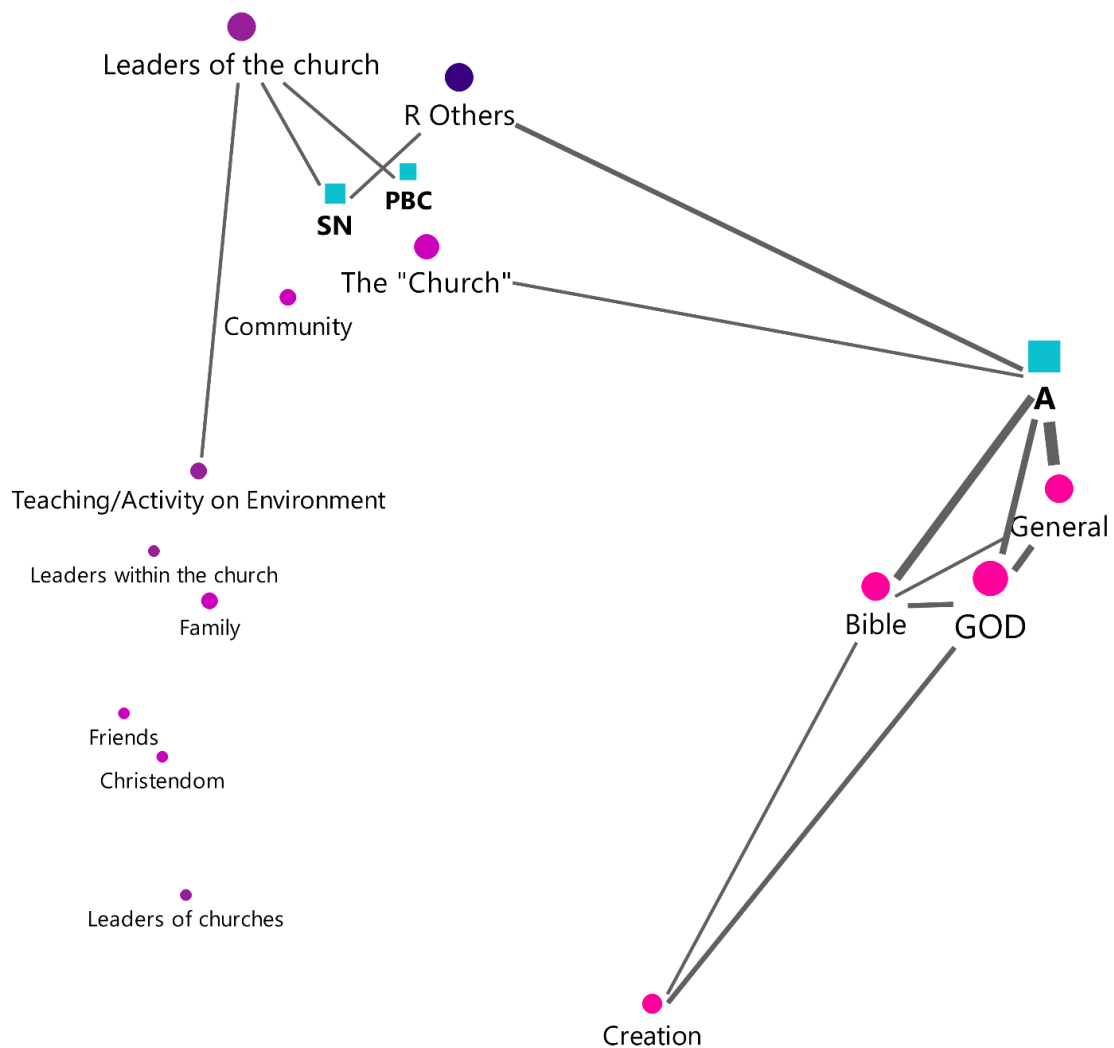


Figure 14: Code Map on Religious Influencers and Elements forming Intention. Connections are drawn from 20 intersections upwards.

But what do these interconnections now signify exactly? Towards what kind of behaviors do they foster the specific elements **A**, **PBC** and **SN**?

6.2.1.1. General religious convictions

As analyzed in the previous chapter most of the intersections with “General Convictions” are with **A**. When zooming into these intersection one notices that most of the attitudes are not per se related to a specific behavior but that all kind of behaviors are countenanced if they fulfill one purpose and that is: To know God, to obey God, to glorify God, to live all the life with God, to reflect God’s being to other people. Generally, actions were merely the expression of one’s faith about God and the divine reality. Others also stressed that the faith is like a ladder to climb or a fight (in Arabic #jihad#) to choose the right options in obedience to God and, hence honoring Him. A lot of intentions also were directed to religious activities, like praying for example.

A lot of those attitudes referred to the broad behavior to love and to respect everyone. All interviewees stressed that their religion is primarily about loving each other, showing forgiveness and respect to every person despite religion, gender or nationality,

because every human being is a child of God and created by him. Others added that all behaviors showing honesty, purity, justice, spreading peace and sharing are desirable as well as those that include caring for oneself, others and the space people live in. People also feel a God-given responsibility to take care of other's well-being and spread everything that is positive.

The spiritual convictions hence shift the focus of all actions to one goal that is God or to have what people describe as religious life. The following quotation points out how every behavior can come under the umbrella of this one goal:

"I mean, if my job isn't about service, I will quit. Because I don't want to lose my time doing something that is not serving, eh, others or .. eh... or being.. or losing time not being with my.. my Lord, with Jesus." (Interviewee 10 on 5/30/2019)

Two leaders had a very strong view of the roles of Christians within the society (Interviewee 3 on 4/16/2019; Interviewee 8 on 5/18/2019): Influenced by their convictions Christians should not retreat from the world and await heaven as a place of rescue, but that everyone has the God-given responsibility to transform the world they are living in into something better. Both portrayed Christians as being the ones having the spiritual freedom and strength to get engaged in improving the Jordanian society actively by their honesty, justice and purity (Interviewee 8 on 5/18/2019; Interviewee 3 on 4/16/2019).

"I believe Christians .. can make the best citizens .. if they .. learn that they should honor God.. and, eh, at the same time.. to know that they can .. mm... with their attitude, with their honest-, honest , eeheh, life with their .. purity, can make a difference in the world and in the-, in their countries, they can be, eh, they can make difference because they can be very honest in their work, they can be very just, ehm.. they don't, eh, accept favo-, favoritism, eh... so, eh... so, I believe.. we are called to.. to, ehm, work for justice in the world." (Interviewee 8 on 5/18/2019)

6.2.1.1. God

The way people talked about God it shows that because He is God, He influences attitudes. That is due to the strong desire of people to be in a relationship with God, sharing one's life with God and offering their life to God. They agreed that this relationship is supposed to change the lifestyle of a believer. Some specifically talked about the "Holy Spirit" residing within them, communicating and leading them in order to fulfill the will of God better and more fully and getting to know God more and more.

What people know about God comes usually from the Bible and the personal religious convictions, that is why the codes are very close spatially in the code map (see Figure 14). God's character and actions are believed to be completely displayed in Jesus life and actions are an example for people to follow. Usually people referred to His mercy and love, but also righteousness or judicial role.

“And in the same time.. Jesus Christ himself. We have a living Bible. Okay? Eeeh, we-, he is our example, eh, he is our model, okay? That we have to follow him.” (Interviewee 15 on 6/26/2019)

Participants gave the impression to seek God and to do what He does, or Jesus did. For example, just as Jesus said himself that he came for the needy and sick people, interviewees reported to try to adopt that worldview and imitate that. One interviewee was applying that worldview in a very direct, social way:

“#I live love in two ways, here [in the church community] I accept love and at [the center that supports needy people], and as I have told you, I see Jesus in the person who gives and I see Jesus in the person who I can help there [at the center].#” (Interviewee 12 on 6/8/2019)

Another aspect was that something given by God, means that there is a purpose for it and that believers should use it accordingly, hence forming the attitude for a certain behavior depending on what people refer to, be it talents, money or family.

When it comes to the influence of the category “God” and **PBC**, interviewees again did not specify in what kind of behavior God enables them. Very often people spoke about a life-confirming support from God’s side, that God helps them to continue even in tough times by providing strength, happiness, by being present, reliable and showing forgiveness for mistakes.

Regarding **SN**, interviewees rarely put it that way that God is expecting a certain kind of behavior of them and that for example God like a good friend questions or confronts a certain behavior if not in line with His expectations. Interviewees mentioned that they see that God wants them to use their freedom in a good, un-egoistical way.

6.2.1.2. Bible

When having a look to the intersections of Bible and Attitude it’s again difficult to summarize what kind of behaviors the Bible advocates by influencing the attitude.

All the interviewees interpreted the Bible as something which influences their attitudes by displaying the perfect morals in the way Jesus acted or the ideal of how God meant the world and human interactions to be. The Bible hence is a very important tool to define who God is and what He wants. As a very commonly stated issue of the Bible was to love God and love people, or to put it in other words: How to be in a proper relationship with God and with other people. People stated the Bible as something to reflect their actions and attitudes on, reorient themselves, to ponder what is important for their lives and how to behave generally.

There are numerous examples when interviewees referred to the Bible when explaining their attitudes e.g. how to look at needy people. The worldview of the Bible e.g. animates people to get engaged. One could say that the general convictions set the motivation to carry out certain behaviors and the Bible substantiates this motivation with concrete actions as e.g. to love everyone.

“Eh, we have the Bible that ehm, can show us the way of how to live, and how to be a good person, how to be, eh, how to have faith in God, how to, how to communicate or have relationship between the others.” (Interviewee 4 on 5/4/2019)

The Bible does not only define a code of conduct generally, what behavior Christians should strive after, what’s right and what’s wrong to do, but it speaks about the role of Christians within the society. Some interviewees mentioned Bible verses to stress the source of their motivation for what they work for, so as this interviewee quoting from the Bible:

“You said-, like, [...] maintaining peace, trying to make things better; where do you get the inspiration .. to do so?”

From the Bible. From the Bible, eh.. when, eh, when Jesus Christ, eh, eh, was talking to.. the crowds and he said: <<Go and help.. the.. the weak, if you don't help the weak, go and visit the imprisoned, feed the, the .. hungry people, medicate the, eh, sick people, ehm.. give them relief and eh, when they asked him, eh: We have never done this to you Jesus Christ. He said: When I was hungry, you fed, when I was-, was weak you visited, when I was sick you visited me, when I was thirsty you gave me, eh.. water, when I was weak you empowered me. And they said: But, God, we did not do this to you, he said: Whatever you have done to the weak and to my little children, you have done to me.>> So, that was my inspiration.” (Interviewee 5 on 5/6/2019)

6.2.1.3. Other Religious Components

Other religious components were partly having an influence on attitudes regarding religious behaviors such as conversion, confession and altering the Christian worldview. But there were also enabling and encouraging aspects such as helping people to grow spiritually, how to dedicate one’s life to God and have proper religious convictions according to church tradition for example.

Yet another part was not further elaborated to which specific behaviors people were referring when they mentioned a change in attitude.

6.2.1.4. The Religious Leaders of the Church

Mostly leaders were reported to inspire people. Interviewees did not speak about a certain attitude for a specific behavior being formed, but rather a lifestyle showcased by leaders which interviewees tried to follow. The love and sacrifice of leaders dedicating their life for religious service and their general behavior in the community is seen as an example of Jesus.

The other part of the medal was that two leaders described their position as coming with huge responsibility because leaders are be looked at as examples in their behaviors and need to show that behavior first before they can demand anyone else to do it.

However, some participants also stated that even though they respect their leaders they would not choose them as ultimate examples or as ultimate source of inspiration:

“Ehm... like... ... do you look up to your pastor, like an example? Or...?”

Okay, my example.. the only one Jesus. Number one. And he's good, yeah, the pastor, yeah, he is good, yeah, also he is good. ... But he's still a human being. Yeah, and we are all .. eeh, we are all, eeh.. human being and no one completes.” (Interviewee 11 on 6/1/2019)

Furthermore, leaders were experienced as helpful for people to grow spiritually and being closer to God. They also encourage people to carry on in life, give a new perspective on problems and enable people by counselling to re-think their situation (Interviewee 10 on 5/30/2019; Interviewee 9 on 5/29/2019). Sometimes they can give a concrete example of how people are able to offer their life up to God (Interviewee 12 on 6/8/2019).

When people felt that leaders exerted influence on their behavior, they referred to a code of conduct upheld by leaders of what's right and wrong and telling members what to do. Also, their decisions are to be followed.

6.2.2. Impact of Religious Influencers on Elements forming Intention for Environment-friendly Behavior

As it can be seen in the cross table in Figure 28 and Figure 29 the most dominant religious influencers on an environment-friendly intention are:

- Creation (~60 hits)
- God (~45 hits)
- Teaching/Activity of the church (~40 hits)
- General Convictions (~35 hits)

A is the most important element with about 130 intersections, whereas **SN** has about 100 intersections with religious influencers, even though **SN** has only 65 codings. That means **SN** intersects with two religious influencers at the same time in average. **SN** is mostly affected by “Teaching/Activity of the church” and “God” with about 20 hits each. **PBC** almost carries not weight. Those results are again illustrated in a code map in Figure 15.

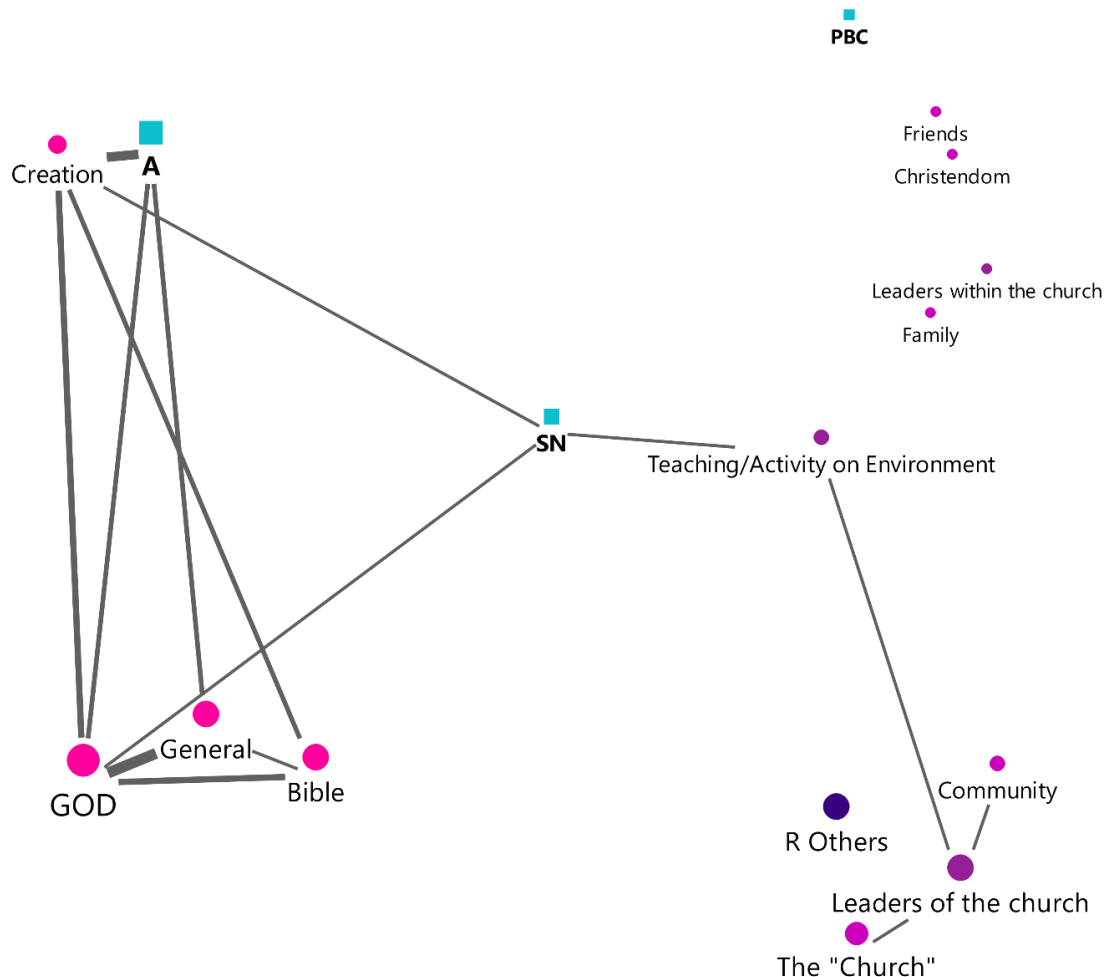


Figure 15: Code Map on Religious Influencers and Elements forming Intention for Environment-friendly Behavior. Connections are showing from 15 intersections upwards

6.2.2.1. Creation

First, it must be noted, just as it is perfectly portrayed in Figure 15, that the codes “God” and “Bible” are strongly entwined with “Creation”. Fascinatingly, “Bible” is not an influencer of **A**, but what people knew about “Creation” was mainly sourced by “Bible”. Christians define the purpose and value of physical world and their place within that world mainly from the creation narrative in the Bible. God created the world for people to thrive in and to be their habitation. God entrusted creation to mankind, which should act as steward caring for it, multiplying it and serve it so it shall meet all the needs of the people. One leader related having authority over earth to the meaning of serving it:

“The authority God gave us over earth. I... full-heartedly believe this means that I need to care of it. Ehm, Jesus came, when he .. when he came as a teacher and a king, he actually washed.. the fe-, the feet of the, of the disciples to say this is the way we need to make, when you, when you see yourself bigger or more important person or highest, eh, position, that's mean you should be more able to serve others. So, if we are in higher position.. eh.. have, eeeh, of having authority over earth, so we need to take care of it, we need to serve it.” (Interviewee 8 on 5/18/2019)

Creation, the physical world created in a very good way, is a gift of God handed over in the hands of mankind. Because everything is created, there is divine purpose in it. Every creature has a place and a right to live because it was created and meant to exist. Creation should not be destroyed indifferently but be treasured and animate believers for thankfulness and being in awe of the creator.

Interviewee also picked up the story of the Fall of Man as an event that destabilized the whole creation. Some interviewees mentioned the idea that creation suffers from the sin of man and is longing for Christ's return which means that creation will not be destroyed but will share in redemption of God and will become more beautiful giving a justification for people to care about their natural surroundings. Some argued that if God cares for creation, believers would be judged according to how they behaved in this aspect as well.

“So, my world today is not just to sit and see how the world will be turning to pieces, rather I believe Christ will come to restore the original creation setting that God has done for this world as in the Garden of Eden.” (Interviewee 3 on 4/16/2019)

The only way how creation exerts influence on **SN** is by being coded so spatially close to “God”, that it accounts also for “creation”. That explains why **SN** is often coded double.

6.2.2.2. God

A lot of notions had already been presented in the previous chapter since the code categories are highly entwined.

Most statements of **A** that is fostering an intention for environment-friendly behavior are sourced from the notion that God is author of life. Since God created, continuously sustains, loves and cares for His creation believers should feel and care in the same way about it. Just as people are not indifferent what happens to items they bought; God will not be indifferent to what happens to His creation. One interviewee related the motivation to care for creation out of the deep desire to know God's heart and mind more and more and getting into a closer relationship with Him:

"So, my environmental action is anchored in my desire ... to know the heart and the mind and the thoughts of God and live ... in the way ... that is ... that just makes his heart warm." (Interviewee 2 on 4/1/2019)

Similarly, people condemned the misuse or selfish, excessive exploitation of nature, because it holds an intrinsic value as a piece of creation. God will also not get rid of creation at the world's end but restore it as it was meant to be, so caring for it is sensible even more since it's a good gift from God which mankind ungraciously started ruining it.

When "God" was intersecting with **SN** people often described God's initial purpose for creation and related expectations towards mankind. Since God entrusted the created world to humankind, all humans alike have the responsibility to keep it in a good state and use it for the common good of all people. Interviewees also concluded that God is angry with how mankind is currently abusing the natural realm and that God will judge humans also according to the way they dealt with the environment.

6.2.2.3. Teaching/Activities

The number of true intersections is lower than given in the overview of the chapter because some codings were intersecting not meant to give a hit with "Teaching/Activity of the church" but with "God" or "Leader of the church". Rarely it was the actual teaching to exert a pressure to comply for people but more that a certain teaching or activity was carried by the community or the leader. Hence, it is mostly the leader or community impacting **SN** not the teaching itself.

One interviewee reported that she had experienced a lot of leaders getting involved in extra-ecclesial topics such as water wastage. She listed numerous examples where priests spoke up to the community regarding this topic hence also exerting an influence on her **SN**.

"When [our leader] came he told him: >>You have to stop here. The water is so expensive, and we can't find it easily. We need the water for everything<< and he made a whole sermon about this topic, twice." (Interviewee 9 on 5/29/2019)

6.2.2.4. General Convictions

Basic notions for why people said they should get involved in environmental actions is that they share the worlds with other people, that whatever affects the environment affects other people and that it is their responsibility to be thinking of others and bless every human being by wisely managing the world's resources. As the basic message of Christianity is to care for oneself, others and the space people live in, believers' authority or responsibility means to serve others and being transformed by the knowledge that God loves and sustains all His creation. One participant stated that she simply believes that she must be concerned about the environment and hence acts:

"I think I have to do, eeh.. what I ha-, what I believe. I believe that I have to take care of the environment so I start." (Interviewee 10 on 5/30/2019)

The other way around, people condemned wasteful exploitation of resources as injustice and as sin because it deprives others of their share on these resources or their right to live a healthy life. Thankfulness for what has been given finds expression in taking care of the gift and hence thankfulness will be blessed.

Some specifically religious concepts or imagery were also mentioned. For example, one interviewee said that if people would remember that they were made from soil, they would treat the land with more respect (Interviewee 13 on 6/13/2019). A leader said that taking care of nature is a step to reach to heaven. He also opined that as soon as man found peace with himself and God, he would treat all living things with more peace and love and not have a desire to harm them, because he would see basically all creation worshipping God with him:

"When a creature, eeh.. reach ... peace with himself .. the level of peace and, eeh... peace with himself and God.. like, yeah, eh, to be in a good relation with God .. and with himself as well .. eh, he will see all .. he will see all the creature .. worship God. .. And .. in this way, he would never destroy it, he would take care of it .. and have like ... that feeling toward this creature-, creating, everything around us. [...] [The elder saints] said about this that all the creation.. worship God. Even if you go to [...] Psalms, one of these Psalms say, eeh, water, mountains and all creature worship God and thanking God. So... this is what happen when we are renewn .. with all crea-., creations, yeah. And this is like .. what the elder saints.. eh, asked us and tell-, told us about." (Interviewee 13a on 6/13/2019)

6.2.3. Impact of External Influencers on Elements forming Intention for environment-friendly behavior

The External Influence on an environment-friendly intention is mostly coming from the water situation (about 45 hits) and partly from “Environmental Topics” and “BGSE issues” (both about 20 hits) as it can be seen in Figure 30 and Figure 31.

Whereas **A** with (about 75 hits in total) is mostly influenced by “Water” and “Environment”, **SN** is mostly influenced by “BGSE” and “Water”, even if the total number of intersections with all codes is low in general (about 30 only). **PBC** carries almost no weight again. The code map in Figure 16 describes these results illustratively. It can be also seen that there is a thick nexus between the “BGSE issues”, “water” and “environment”.

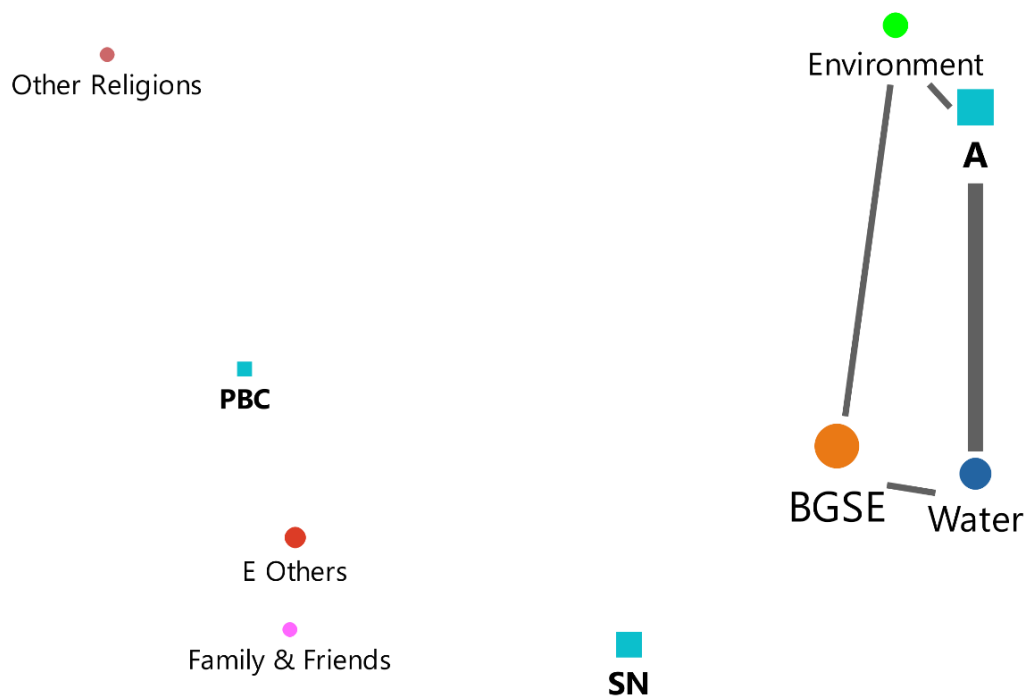


Figure 16: Code Map on External Influencers and Elements forming Intention for Environment-friendly Behavior. Connections are showing from 15 intersections upwards

6.2.3.1. Water

Most of the positive attitudes towards water saving behavior came from the knowledge that water is scarce. Because of this and the fact that water is essential for life, people opined they should not waste it. Some interviewees also were concerned about the implications of water pollution or water scarcity that they heard on the news and made them act: fish dying of pollution in Iraq or the draining of Lake Tiberias (Interviewee 5 on 5/6/2019; Interviewee 8 on 5/18/2019).

Adding to that interviewees that had experienced scarcity in water due to the intermittent water supply highlighted this experience as eye-opener for the situation:

“You know, when we first moved here there were several times when the water ran out, and.. then we.. didn't know what to do and had to learn the whole system. Ehm, so.. but as a result it caused us to realize: Okay, we .. don't have unlimited water, like we used to having... So, we started having to pay attention, so... How much water have we used?” (Interviewee 2 on 4/1/2019)

Interviewees felt that they should do their part in having a positive influence as for example to implement small water saving actions or not to throw waste to the street which would lead to blockage in the sewage pipe. The outcome they desired was either to save more water for themselves or for other people as well as future generations. Some called this “belonging to the society”.

“So, if I take care of the way I use water that's mean I will save more water for myself and some other people who I don't know who are they.” (Interviewee 8 on 5/18/2019)

Another outcome mentioned was to prevent conflicts with adjacent states about water. Other argumentation lines applied were that since in other parts of the world people don't have access to clean water, it is unmoral to waste it and that one should be thankful for having access.

The way “Water” was intersecting with **SN** was through what other people said or did. One interviewee reported about countless times when leaders from the community rebuked the wasteful behaviors or people in their community. Those leaders were referring to the high price of water and that water should be used for something with high purpose (Interviewee 9 on 5/29/2019). Also, one participant reported about community members urging him to use only little water when doing household chores (Interviewee 8 on 5/18/2019). Some participants recalled their family using certain water saving techniques to deal with water economical:

“#And even our grandmother, may her soul rest in peace, when we used to run out of water, she used to put the snow in pots and save it in tanks#” (Interviewee 9 on 5/29/2019)

So, it was not actually the code “Water” intersecting with **SN**, but people employing scientific arguments and hence creating a pressure for people to comply.

6.2.3.2. Environment

One of the most common arguments why to support environmental-friendly actions was that without nature mankind would not be able to survive. Trash in the streets would come with sickness and degradation with catastrophes threatening human lives. Also biodiversity loss would be a threat for human civilization even though the protection of species is also desirable even if there was not a consequence for humans, two interviewees opined (Interviewee 3 on 4/16/2019; Interviewee 6 on 5/7/2019).

People reportedly feel grief whenever they see degradation of nature (Interviewee 10 on 5/30/2019; Interviewee 12 on 6/8/2019). On the other hand, they enjoy nature as something beautiful (Interviewee 10 on 5/30/2019; Interviewee 12 on 6/8/2019; Interviewee 15 on 6/26/2019).

6.2.3.3. BGSE

The only time a participant felt a pressure from society to comply with an environment-friendly behavior was the cultural norm of her home country where a certain behavior is subject to shaming. That is why people usually comply with the expectations which are also expressed in standards of government:

“So, the cultural norms in [my home country] are: It's a desert.. climate, it's an arid climate. And, ehm.... That does not have unlimited water, so.. you are aware of, you know, what- ... If you're gonna plant grass on your lawn [...] you know it's not good and it's not gonna work.. and it's bad for the community [...]. Ehm, and that that would be an irresponsible thing to do. [...] And your neighbors would be like: What are you doing?” (Interviewee 2 on 4/1/2019)

Few other interviewees also had this notion that their citizenship obligates to behave in a certain way and feel responsible for the community (Interviewee 3 on 4/16/2019; Interviewee 7 on 5/9/2019).

6.2.4. Combined Impact of Influencers on Elements forming Intention for Environment-Friendly Behavior

The cross table depicted in Figure 32 in the annex shows that **A** has most of the intersections of all the elements with about 220 hits, but **SN** is following up with about 140 intersections. **PBC** has a negligible amount of intersections. It shall be remembered that the meaning of **PBC** was inverted and now can be translated in perceived easiness to carry out behavior.

Even though the religious factors such as “General Convictions”, “Bible”, “God” and “Creation” on **A** are still perceivable, the external factors if combined are noticeable higher. However, if all religious factors are combined, they are about twice as high as the external factors which is also the case for **SN**.

Figure 17 summarizes graphically what has been analyzed before. It can be easily recognized how **A** is sourced by both religious and external influencers and hence is located in between. Even though “God” and “General Convictions” are influential, “Creation” is closest to **A** and kind of forms its own cluster separated from the other religious categories.

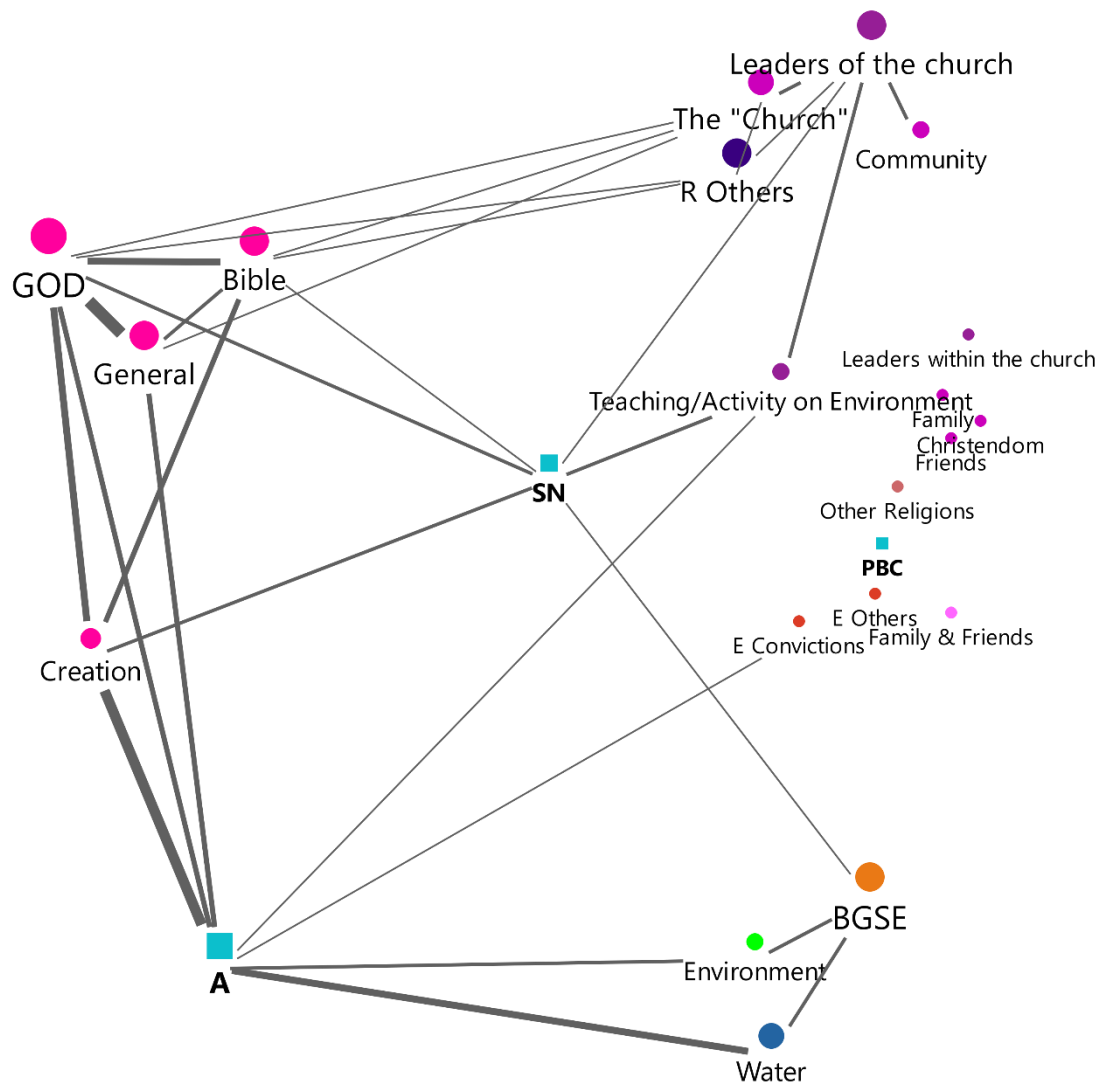


Figure 17: Code Map for religious and external influencers and elements forming intention. Interconnections line were drawn from 10 intersections upwards.

SN is also very interesting displayed in the code map. It is fed by all other clusters in some way and has no strong affiliation to any of the other clusters. It stands alone in the center of the map. However, it must be kept in mind what has been analyzed before, namely that **SN** is not fed by “Creation” or “Teaching/Activity of Church” but those are mostly factors of argumentation entwined with “God” and “Leaders of the church”.

PBC is hardly distinguishable in the left side among all the social categories whether religious or external.

Another striking fact is that none of the external influencers has more than 10 intersections with a religious influencer. They are truly two separate sectors of influencers. Even if the counting procedure of intersections was changed from actual intersections to paragraph intersections, the overall pattern of the code map did not change except that “Teaching/Activity on environment”, “Creation” and **SN** moved closer to the external influencers cluster.

6.2.5. Impact of Religious Influencers on Elements forming Intention for Environment-Unfriendly Behavior

A cross table for this chapter does not give much insights since there are as good as no intersections between religious influencers and elements forming intention for environment-unfriendly behaviors. The overall number of intersections account for 25 hits only. This is of course also due to the very low coding of negative elements in general. One could interpret this result as such that religious arguments only do foster environment-friendly behavior, but it is just as interesting to know about the hindering factors within the Christian faith.

The negative influence on **A** roots in the notion of one participant that the effort to save water would not be of importance to God as it is something minor and as the believer is not saved by actions but by faith. Adding to that comes the cruel and horrible happenings on earth making the interviewee declined to say that God does not want this place to stay much longer:

"I don't believe that my action to close water would matter so much to God, I mean it's just like ... eh.... just like, if you pick up the trash from the street, I don't believe this is something that ... [...] personally, I believe as probably most Christian believe that, what matters is the inside, how you ... the reason for salvation is ... your belief. Eh, I don't believe action in a religious way leads to salvation or being good with God. So.. I don't actually think by closing the ... eh water, I have done something that God will find: Oh, my God he's, he's a righteous guy. You know?" (Interviewee 1 on 2/21/2019)

How people felt disappointed or pushed away by religious factors were the incredulous presentation of leaders advertising for water saving behavior on TV but also realizing that even fellow Christians do not care about these topics.

Some members even confronted the water saving behavior of interviewees in a ridiculous way and that makes the interviewee less likely to speak up to the counter next time:

"I was telling someone: Please, don't, don't let the water run this .. much strong from the tap .. and the .. he just laughed." (Interviewee 8 on 5/18/2019)

6.2.6. External Influence on Elements forming Intention for Environment-Unfriendly Behavior

The cross table for external influencers and elements for environment-unfriendly intention (see Figure 33) depicts an interesting pattern: First, the most dominant influencers for all the elements combined are "BGSE issues" and "Water".

If the elements are differentiated in **A**, **PBC** and **SN** one can clearly distinguish that most hits are caused by the **PBC** (65 intersections in total, of which 30 with "BGSE" and 25 with "Water" respectively).

The meaning of **PBC** was modified beforehand to the perceived easiness to carry out an environment-unfriendly behavior. It shall be anticipated here that this meaning does not fit perfectly. The codings could be sorted in the following categories:

- a) That people showed a certain empathy or understanding for the assumed reason why other people didn't care about environment-friendly actions

People often named the bad economic situation along the political troubles as one of the key reasons why they think other people simply might be occupied with other issues which are more important and urging for them. Others also made a lack of education responsible.

"I feel ..in our society in Jordan ... the ecosystem, eeh, nature doesn't take a high priority which is sad, okay? But when I look at the society, because there are so many other, let's say in .. basic needs that are not being, eh .. sometimes met, satisfying the ecosystems, eeh, come as a, eeh, second degree, even though it's very important, in, eeh, nature, wildlife, natural resources.. eeeeh.. taking care even of the .. nature.. That is a problem, but in Jordanian society, as a society.. people don't consider it as a, as a problem. Because, eeeeh ... They are worrying about other issues while it is a, it is a, it is a problem." (Interviewee 6 on 5/7/2019)

- b) That they showed a frustration about a part of society which lives according to the motto "After me the deluge" or who simply do not care

However, other interviewees assumed that others don't take the water scarcity seriously and mourned a general state of indifference and laziness in society regarding environmental protection. A part of the society which was commonly criticized were "the Rich" which always had the connotation of being wasteful because they could afford to call a tanker for extra water supply or buy food more than they need.

"Especially when we go to some places, the rich people in some areas, because they have-, whether they have big wells in the hou-, in, in, under their houses or.. because.. they don't mind to keep.. calling for tanks to pay for water tanks to come and fill their .. ehm... eh, houses' wells or whatever, so they use it, they use it a lot." (Interviewee 8 on 5/18/2019)

- c) That they criticized the government for not taking responsibility

Some participants also criticized the government for not discharging its duty as it is supposed to, but even worse taking advantage of its power. Those people described a common feeling that if the people in charge do not care, I will not care as well.

“And .. here we have ... eeeh.. some people higher than the others, or, we have a differences between the peoples. Okay? Because I am .. a very, eeh.. strong man in the government, I have a power in my hands, so I can.. take the water 24hours 7days, they don’t cut the water on me, because I am .. in the government, I am in the .. parliament, okay? Whatever. So, the people hate this, okay? and they want to revenge from the government sometimes, so they treat their government and the country, eeeeh... in a, in a .. wrong way, okay? [He] has the power and he doesn’t care, what.. why should I care?” (Interviewee 15 on 6/26/2019)

Another interviewee also argued that no one can blame people using as much water as they want if they pay their bills. He saw the government responsible in signing tickets to punish high consumption.

d) That they said to not feel the water scarcity due to the good supply

A good number of interviewees however, described their water supply as good or mentioned that it had improved over the last years. One said the water scarcity did not have a drastic effect on him personally (Interviewee 4 on 5/4/2019). Another interviewee reported that her caution of using water sparingly was decreasing drastically as soon as she found out that her apartment was connected to an extra underground storage cistern:

“But I would not say that I could rate myself very highly on .. not wasting water; compared to how I functioned when I didn't know about the pump based on how I function knowing that I just can turn on the pump? It's a different .. usage .. of water.” (Interviewee 2 on 4/1/2019)

6.2.7. Combined Influence on Environment-Unfriendly Behavior

If religious and external factors are combined (see Figure 34 and Figure 35) it can be compared what has a stronger influence. The weight of the external factors on environment-unfriendly behaviors is more than six times higher and most of those influences stem from the codes “BGSE” and “water”.

This is also nicely pictorialized in the code map in Figure 18. The “religious convictions”, “Bible”, “God” and “Creation” cluster densely in their right lower corner. **SN** and **A** are hard to distinguish but are torn between religious community patterns and external influencers. **PBC** however forms a dense cluster with “BGSE topics” and “Water”. Environmental topics (green) are also not too far off that cluster.

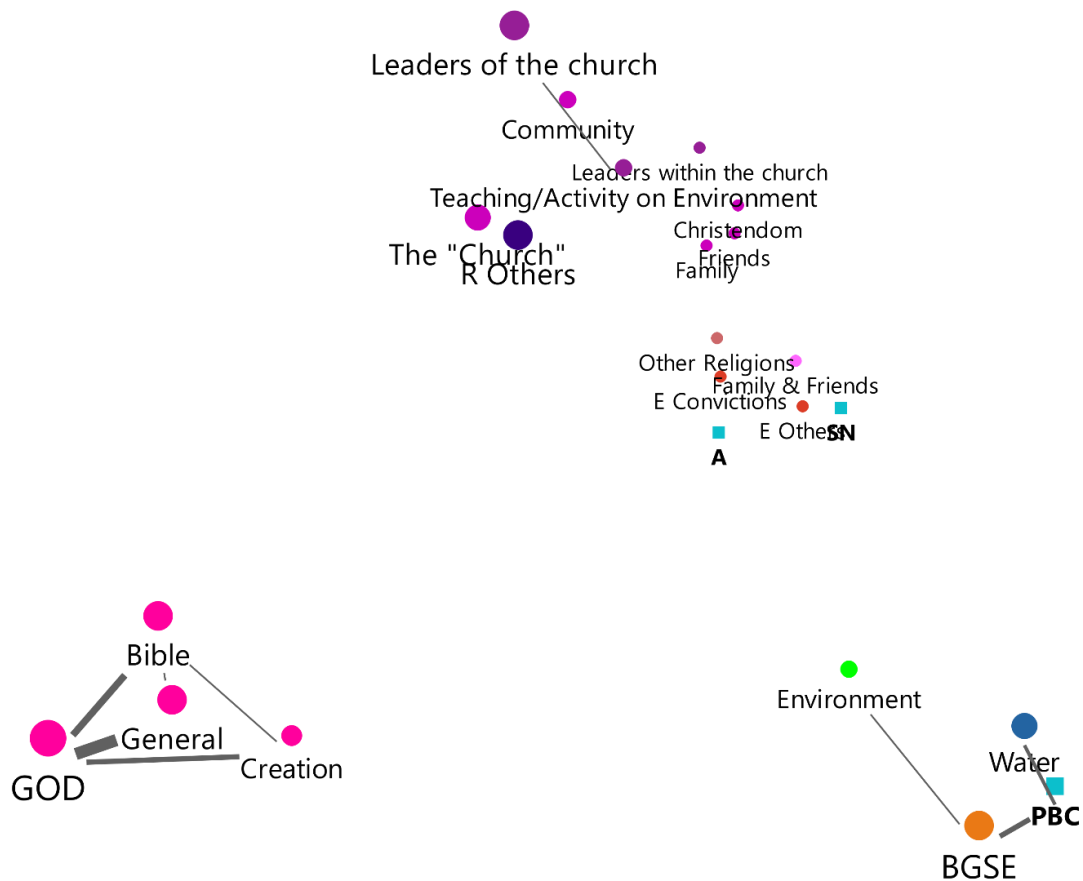


Figure 18: Code Map for religious and external influencers and elements forming intention for environment-unfriendly behavior. Interconnections line were drawn from 10 intersections upwards.

6.3. Impact of Elements on Behaviors

The next step to investigate is what the single elements forming intention, namely attitude, perceived behavioral control and subjective norm contribute to behavior. For example, people can have a positive **A** to the outcome of the behavior, but they miss the **SN** or **PBC** to really make them carry out the behavior in mind.

Because an extremely low numbers of environment-unfriendly behaviors were reported by the participants, it shall only be analyzed how the elements forming intention imprint themselves in general and environment-friendly behavior.

6.3.1. Impact of Elements on General Action

Figure 19 gives a simple overview over the interconnections: About 30 interconnections were found, but 44 text segments were coded as general behavior. That signifies that at least one third of the actions were not mentioned together with one of the elements. This might be partly since some motivations were stated earlier and not mentioned afresh when people talked about the behavior.

Codesystem	For ...	A	PBC	SN	Gene...
▼ A, PBC, SN					
▼ For general Intentions					
A			14	9	21
PBC		14		7	3
SN		9	7		5
General Action		21	3	5	

Figure 19: Influence of Elements forming Intention on General Actions

General Action is dominantly influenced by **A**. **PBC** and **SN** only play a minor role. **A** is more often coded with **PBC** than **SN** with **A** or **SN** with **PBC**.

6.3.2. Impact of Elements on Environmental-Friendly Action

About 35 out of 45 actions are relatable to the elements having formed the Environment-friendly behavior (see Figure 20). That is a higher rate than for the general actions but still leaves 10 actions unexplained. This is might also be due to the counting method or to the fact that people explained their motivation earlier and then a while later they mentioned what they did without stating their motivation afresh. Just as the general behaviors, the Environment-friendly behaviors were dominantly influenced by **A**. **PBC** is almost negligible whereas **SN** still has some more influence on people to carry out the behavior in question.

Codesystem	Enha...	A	PBC	SN	EF Ac...
▼ A, PBC, SN					
▼ For Specifically Environn					
▼ Enhanced EF Intentic					
A			4	9	25
PBC		4		2	3
SN		9	2		7
EF Action		25	3	7	

Figure 20: Influence of Elements forming Intention on Environmental-Friendly Action

When tracking the elements back to their origins, namely their influencers, most of them are stemming from external influencers, most important “Water”. The others are coming from a religious influencer. However, if it would not be for Interviewee 10, the influence of the religious influencer would have been minor.

All the results will be further interpreted and discussed in the upcoming main chapter.

7. Interpretation & Discussion

During the research process of acquiring interviewees, guiding interviews, coding and analyzing there were lots of pieces of knowledge gathered on how the research method, researcher's bias and reactions of participants influenced the coding process and the analysis. It might be useful to re-read those different sections which are all described in detail in the Methodology chapter 4 and continue reading the interpretation with the knowledge of the research process.

7.1. Discussion of Analysis

7.1.1. The impacts of religion on general behaviors

As analyzed in the previous chapter the most influential religious aspects are the personal convictions one has gained from his/her faith affecting mostly the attitude. Those comprise convictions about or from the Bible concerning God and other aspects of faith. There is a good probability that the attitude is also the strongest in regard of religion to form an intention for a certain behavior.

Faith seems foremost to construct a worldview wherein different actions can gain a divine meaning for the believer. Whereas the various convictions surely are also a result of indirect, sub-conscious and life-long thought processes induced by spending time within a religious community, the community was averagely not mentioned in the first place as an influencer. That explains the underrepresentation of Subjective Norm. If most of the influencers are coming from a personal belief, how could they exert an influence on subjective norm which is per definition depending on a social environment? The idea that God observes and expects the believer to do something was almost not existent. Probably that was due to the high religiosity of the believers themselves which all gave the impression to follow their belief freely and decisively. They did not feel forced by God to do something but rather adopted the will of God as their own.

If people were speaking about someone in the social aspect of the religious community it was very often the religious leader. This might have been also thanks to the dedication of a specific interview question regarding the leader, even though there were also questions assigned to the religious community. Supposedly the religious community is often a vague and loose community of people since a lot of the church congregations gather a several hundred Christians and their respective families. As the leader is usually in the center of the service and point of contact for the believer in religious questions, they put more focus on his actions and speeches than on the overall community. However, the Subjective Norm of the leader is also not high as can be seen in the analysis. The leader might set up certain rules within the community and appeals people to abide by them, but as soon as people step out of the community into their everyday lives the influence weakens tremendously, because the leader obviously cannot "check on them" and confront them.

Yet, when people talked more specifically about members of their congregation, it was when joining community groups of a small size. All kind of groups targeting a certain

group of people or groups dealing about a certain topic gave more room and time to people to get to know each other and exchange. Members of church who are not an active member and do not visit other groups for any reason will have a very low impact of Subjective Norm from the religious community, unless the family itself exerts the pressure. But to which extent that is the case cannot be said exhaustively.

But since the behaviors in discussion (general behaviors) were not preset but retrieved from the interviewees generally, people mostly justified everything with their religious convictions about God, the Bible and the essence of Christian faith. Probably, if people are not asked about a very specific action and in which way the community or the leader influences them to do it, they will shift back to the religious meaning of their faith and neglect the role of the leader and the community. This most likely was the reason for the overrepresentation of the general convictions and Attitude. Yet, there is no reason to reject the model based on the theory of Ajzen that the church community and the leader can apply a certain Subjective Norm on the individual. First, because there had been some interconnections in the analysis and second as Christian communities are not unlike any other community of people.

A bunch of other religious influencers were unexpectedly identified. From analysis they seem to exert quite a strong influence on the attitude but were diverse in their impacts. Sorting them into new or existing categories might help in identifying new patterns among the influencers.

From analysis, the attitude is the most dominant driver for general behaviors. As the numerical basis is quite low and due to the underrepresentation of the other two elements Subjective Norm and Perceived Behavioral Control it is questionable whether most of the religious influence is really coming from the attitude or if the weight would shift to other religious aspects if focused on a specific behavior.

The most noticeable religious difference between the interviewees was 1) the importance of the Bible and in relation to that 2) the role of the leader. Generally, it can be said the more people rely on the teaching authority of the Bible the less they feel the necessity to view their church leader as an example. This probably also is a result of the structure of the respective church. The tendency is that the smaller and non-institutionalized a church community is, the more the position of the leader approximates to the position of members and the Bible gains importance as the leader does not have the authority to speak and embody final truth.

7.1.2. The impacts of religion on environment-friendly behavior

As already anticipated in chapter 4.2 the samples of the study were surpassing the average Jordanian Christian in religiosity and concern for the environment. "Concern for the environment" encloses a general attitudinal support of environmental protection that however lacks profound knowledge on facts and sometimes concrete actions. This would also explain why none of the interviewees participated actively in the behaviors harmful for the environment whose motivations the researcher was trying to explore as well and which she expected to find too.

However, when people initially were requested to describe the core of their faith, the protection of the environment was not emerging as a topic. Only when asked if there was a connection between their faith and environmental protection, all interviewees except one agreed. That is proven by the fact that the attitude for an environment-friendly behavior mostly could be traced back to “Religious influencers”. The most prominent example people derived from their faith for the justification why they should not be indifferent to the natural environment, was its creation by God. The justification appeared so logical and natural which when overthought is striking as most of the interviewees being members stated that they never heard anyone in church connect their faith to environmental protection. Apparently, the belief in a creator-God is so prominent in Jordanian Christian minds that it didn’t need further elaboration on the topic to draw conclusions in-situ. All interviewees had at least a slight awareness on the water situation and when followed-up named some water sparing behaviors. The researcher got the impression that for some of them it was the first time that the connection of faith and environmental protection was presented to them, which attests the validity of the statement that most of them never discussed the topic in a religious context.

Unexpectedly for the researcher, she was only confronted once with a religious counter-argument, such as the belief in the world’s end usually described in the Bible as going along with destruction and that the cruel happenings in the world would make God want the earth not to stay much longer. When the researcher had the chance to confront this argument back to other interviewees all of them never heard other fellow believer using that argument to justify why environmental protection is in vain. Yet she felt that there was some insecurity of how to interpret the concrete meaning of this belief of world’s end.

“So, I think we are not heading into destruction, we are heading into more bliss in eternity, eh, a creat-, into a new creation, a new heaven and a new earth. And how this is going to be done, I mean the Bible has closed the chapter, it's, on this, there is no clear, eh, description of how God will manage all of this, but we [...] believe the new creation will be with that much beauty that we cannot imagine.” (Interviewee 3 on 4/16/2019)

The fact that most of the participants being members never had contact with Environment Theology in their church communities explains why again only the number of intersection with Attitude is high, whereas the number of Subjective Norm and Perceived Behavior Control were so small: There are simply not a lot of people in the interviewees’ religious social environment that would exert influence in that respective regard.

Likewise, a good number of leaders never heard other leaders or people in other church communities deal about that topic. There were only few people who have heard about the Encyclica Laudato' Si for example. Without a social environment holding a certain view about an action, there is no way there can be a Subjective Norm. Even the category "God" mostly did not exert power over Subjective Norm, because most of the interviewees had a very high desire to make God's viewpoint, that they knew from the Bible or their religious convictions, their own. Hence, they were mostly coded as Attitudes.

However, one of the interviewees which was really engaged personally in a lot of environmental-friendly activities and was applying a lot of water saving techniques as well, had a very close and intimate relationship to the community of a monastery and spent one morning a week there with other religiously committed people very well known to her. As this community, where she was helping out weekly, applied a lot of resource-efficient practices, one could interpret it as a social influence on her from which she also initially might have felt a pressure to comply initially.

From the way this interviewee spoke about the community and how she described carrying out the actions also privately, it was clear that she did not do those activities out of a pressure to comply, but that she was profoundly convinced of their sensibility. In this case it would be interesting if there was a change in mentality or sudden awareness at one point in her past and if yes, how this monastic community influenced her and if they applied a religious motivation to their activities. The following excerpt gives an amazing insight in what kind of measures were conveyed to her from the monastic community and how keen she accepted them for her own life:

"Do you know from other churches.. or church leaders .. in Jordan or maybe, like.. in the world.. who talk about [environmental-friendly behaviors]?"

No. But in the monastery they do. In the monastery only, this is what I know, but I don't know about other churches. Eeh... in the monastery, eeh... eh, they take care of everything as I.. #y3ni#, they told-, they taught us, eeh.. so many things. For example: ... Eeh.. this, this priest, he is the boss, you know, he's the, he's the, he taught these nuns what to do, actually. He is .. this kind of person .. that I learned from him a lot. And the, the monastery taught us too, lot of other things that they do as nuns. For example, when they eat.. you know there are some-, sometimes few rices on the place or anything extra.. and, eh.. whatever extra.. eh, we put in a bag or in a dish and they throw it to the birds. ... Okay? Eeh, the water, they take care of the water, eehm... ehm... .. as I told you, whatever I do they do. Eeh, everything that.. maybe they do much, much, much more than me [...]. They.. eeh.. they take care of the environment, electricity, water, eeh, garbage, recycle.. they gave-, they usually give me the recycle .. things they got, eh, from the monastery, I will .. take to [the recycling center]. They give me the caps, they, eeh... eh, they take care, specially the water and the electricity, the take .. good care of

them. But they don't speak to the people in the church, but if you work with them, for example they have visitors, in the, in the monastery they sleepover. They tell them what to do and they tell them how to do.[...]. they try to minimize, eeh, the usage of the water [...] So, the sinks [in the bathroom], they, eeh... eeh.. they minimized.. the power of, eeeh.. eeh, the fau-, faucet, eeh, that, eeeh.. it-, they-, people cannot open it, eeeh, on wide range , it opens, like, 20% [...]. Ah, so.. they do that, eeeh, to.. to take care of the water.” (Interviewee 10 on 5/30/2019)

Another interviewee which had also more hits from the element Subjective Norm was having a lot of personal connections to a lot of church leaders and nuns because of her strong affiliation to the religion. Possibly because she also grew up and lived in not such a rich area in Amman and due to her old age (over 60) she recalled a lot of happenings in the church community where the leaders took the initiative to appeal to people to use water sparingly. Whenever leaders do that it is probable that there is a pressure to comply since leaders commonly are respected persons.

Still there are also examples when the word of the leader is not respected for whatso reason ever. One of the leaders told the researcher the following story about waste pollution caused by their Youth camps showing that the influence of the leader might be depending on different situations and audiences:

“In our camps we have a camp for .. eh, three or four days, okay? And when we gather the, the, the .. the Youth, they were, they will be about .. 120, 150, okay? in this average... We have to clean after them, okay? We have to .. give them, eeeh, notice, okay? that: Please. Treat this place as your home, as you don't allow to yourself to.. to.. to leave your .. eeeh.. leave your rubbish behind you in your, in your .. house, in your bed, in your .. room .. Okay? Do not allow to yourself to do this in the camp. Okay? But .. it's .. useless. .. Okay? Really! We have every time.. to clean up after them. .. Okay? And we spend a lot of time to do it.” (Interviewee 15 on 6/26/2019)

There were as good as no interconnections between the Perceived Behavioral Control and religious influencers meaning there was nothing or no one helping the believers carrying out diverse measures for the environment or water saving activities or giving them an example. Probably this would come in the last state of a behavior-change-process that encloses the whole community: First some people need to have certain attitude on a behavior in question, secondly those need to spread both the attitude and be in an influential position to exert a certain pressure on the rest of the people to comply. After some time, the community has developed a common norm of how to behave and even those who do not necessarily share the attitude feel that it is good if they follow the group. In the third stage problems of implementation might arise and the community might find answers to the question how to help everyone comply with the standards.

Since most of the communities seem not to have reached the level of having developed a common norm in regard of saving water, recycling, etc. it is logic that the religious drivers do not exert a lot of influence on Perceived Behavioral Control which is to be interpreted as easiness to carry out behavior.

7.1.3. The impacts of External influencers on environment-friendly behaviors

Without exceptions all the interviewees knew that Jordan is in a water-sensitive situation. They often referred to the news which occasionally reported about the level of the dams or a lack of water supply in parts of the country. However, most of them did not seem to have further insights, two of them admitting that they do not know details:

“Ehm... .. Actually I don't really now understand what's going on but, eh.. previously there was problems. [...] And, eehm... sometimes I don't understand.. eeeh, eeh... where, from where do they bring the water. Actually I'm, I'm not reading about it, a lot.” (Interviewee 10 on 5/30/2019)

“I don't actually-, I know ... You know, everybody say-, everybody knows and says: Water is an issue in Jordan. [...] But beyond that I don't actually know.. anything about it, other than that is the situation, but I, I don't, I don't have any comprehensive understanding .. other than how the water comes into my house, I don't know the water system in Jordan. And I don't know... what the levels are or how they're ... managed or measured or how they change... I know that it's been raining a ton this spring, ehm, but I don't know how that does or does not affect the longterm water, ehm, I don't actually even know where Jordan's water .. really comes from.” (Interviewee 2 on 4/1/2019)

Hence the assumption is near that people have a quite superficial knowledge on the water situation in general. Nevertheless, this knowledge is sufficient to motivate the majority of participants to reduce their water consumption depending on peoples' other convictions and difference in personalities.

Elaborated knowledge on the water situation is required, however, when one is confronted with subjective perceptions as for example regarding the impact of the heavy rainy season in Winter 2018/2019. The first impression of people is that the rain that season was a lot, so some drew the conclusion that there should not be any reason they must continue dealing sparingly with the water in the up-coming year (Alayed, Zimprich, Date: 4/30/2019). This argument can only be countered when one knows about the state of the groundwater aquifers which had been depleted over years and will not recover with only one season's rainfall. Another occasion confirmed the impression that people are only superficially informed: One person suggested to have a portal where to report the leakages in the street to in order to have someone fix it (Interviewee 9a on 5/29/2019). Apparently he did not know that the water supply company in Amman already offer those services (Miyahuna 2019).

A common theme emerging as a potential reason for people to stop reducing their water consumption and try to consider the future of their country was the irresponsibility of the governmental leaders, people in power and people having plenty of resources. Commonly it was referred to “the Rich” that are not only having more access to resources but are also wasting them. One thing is obvious: There is a huge lack of transparency and a huge mistrust in the Jordanian society towards the governmental leaders that cannot be healed within one year of passing anti-corruption laws.

It is exceptional that most of the interviewees did not let themselves be stopped by those outlooks on society even though if those are found true could render all their efforts in changing the country to the better in vain (generally speaking, not only regarding the water crisis). The interviewees must have a strong motivation to do their part despite the perception that an influential part in society might not care about the needs of others and hence behave in a way that is counterproductive. It is understandable if people refrain from acting on a problem especially if it is the government’s responsibility, but some interviewees also shared the impression that society is somewhat shirking its own responsibility when simply pushing it off to the government. Since the overall Jordanian society is said to not trust the governmental leaders, it might be even counterproductive if those urge the people to save water. It might happen that people’s reaction will be contrariness and purposely not follow along since politicians are usually disliked.

Another common assumption why people do not care about saving water was the economic and political situation of Jordan. It is true that all the interviewees requested to list some problems in Jordan immediately came up with answers belonging to one of those categories. People simply have more pressing problems to worry about. This conclusion was so to say also an opening statement for the research as one of the leaders, whom the researcher informed personally about the objectives, answered that natural protection is not a topic in Jordan since the people have other worries (Leader of church in Amman, Date: 4/3/2019).

Yet this argumentation line does not hold true for the whole society since all the interviewees were at least in the same political situation and all of them showed at least some concern for water saving or environmental protection and, some more than others, carried out small actions mitigating pollution and wastage. When pondering about the economy-reason brought forth it is a sensible conclusion that people were referring to the difficulty to find of job and build a future which they assumed to distract people from a minor problem and not referring to an actual lack of money as this would have led theoretically to an overall more sparing behavior. This does not exclude the possibility that some Jordanians might have real difficulties to pay their water bills and therefore take every measure to reduce their consumption consequently.

It was also noticed that the fear that the water is going to run out in their homes makes people more aware and more concerned about their water use. However, if families have an underground cistern, people are less inclined to worry about their consumption

patterns. If the household runs out of water the solution is to turn on the pump for the cistern or to call a tanker, not ultimately to decrease one's need for water. On the other hand, people who are forced to get along with what they received during the supply times, will need no one to tell them to save water.

There are also hints that people who grew up in times or areas where e.g. water was scarce gain a life-long competence in resource-efficiency. This competence is developed out of necessity, but it is likely to be emphasized due to social pressure from family, neighbors and friends which spend more time together than the religious community. Therefore, the family could act as a nucleus for implementing the attitude into behaviors radiating a social pressure to the rest of the family members and that is something interviewees with children had reported to do within their own family.

The interviews conducted gave hints that environment-friendly behaviors have not yet arrived within the broad society. Interviews commonly stated that Jordanians don't have the mindset to be concerned how to deal with their environment and the resources therein. This impression was gained from interviewees which undertook some activities to save water, recycle or prevent family and friends from wasting left-over food or leaving rubbish in the environment. About half of the times when not speaking to non-family members, people reported about a lack of understanding of the counterpart. It is probable that people who act environment-friendly are regarded as strange. This impression was caught by one of the interviewees that were very active in all kind of environment-friendly behaviors:

"People don't want.. they're lazy, eeheh, they don't want to.. spend time, eeheh, for such.. they, they think that [recycling, not littering from car's window] are, eeheh, silly things." (Interviewee 10 on 5/30/2019)

7.1.4. Other Perceptions from Interviewing

It could also be possible that people heard the same news all over again and again. The statement that Jordan is a water scarce country has almost reached the level of a mantra being said repeatedly without being filled with meaning especially for a part of society having adequate access. Adding to that is the invisibility of the problem. A decline in the groundwater levels cannot be seen and as some interviewees attested an improvement of the personal water supply, other people might perceive the talking about the scarcity as an unfulfilled prophecy.

As the economic situation is described as challenging especially for adolescents, interviewees sometimes mentioned an overall interest of people to emigrate from Jordan (Interviewee 5 on 5/6/2019; Interviewee 7 on 5/9/2019). Especially Christians are considering to leave the country for good as they also become more and more a religious minority. When people see no future for them in their own country, why should they do something to invest in the country's future reducing their water consumption to leave more water for the future?

7.1.5. Combined influence and Update of model

To summarize what has been discussed and to identify missing aspects to lever all elements forming intention, the influence of both realms shall be graphically displayed in the form of a table (see Table 5). The original table containing all the potential ways the drivers could impact the elements was already presented in chapter 3.3.2.4. It shall be noted that Table 5 depicts a very general overview of all the statements made by interviewees. Only the most dominant ones are included.

Table 5: Present impacts of drivers on elements forming intention for water saving or other environment-friendly behaviors. Blue: Positive Impact, Black: Neutral, Red: Negative Impact

	Attitude	Perceived Behavioral Control	Subjective Norm
External Influencers	<ul style="list-style-type: none"> - Basic Knowledge on water situation and environment, used for argumentation - Limited Knowledge on details 	<ul style="list-style-type: none"> - Egoistic parts of society & government demotivate people - Political & economic reasons - Limited supply forces people to save water 	<ul style="list-style-type: none"> - surrounding society usually does not apply any peer pressure
Religion's Characteristics	<ul style="list-style-type: none"> - value of God's creation, mankind as stewards - Authority means serving - Care for nature is care for humans 		<ul style="list-style-type: none"> - Wish to comply with God's desires (usually influencing Attitude)
Religious Community	<ul style="list-style-type: none"> - Little or no topic among communities 		<ul style="list-style-type: none"> - Peer pressure from community is little or non-existing
Religious Leaders	<ul style="list-style-type: none"> - Mixed influence from leaders, some do speak and act, some do not 		<ul style="list-style-type: none"> - Mixed influence from leaders, some do speak and act, and request others to join, some do not

From analysis it can be confirmed that external drivers such as knowledge on scientific facts usually trigger a thoughts' process and have a tremendous impact on people behaviors. They can form a justification on their own why people should get active e.g. if the street is full of litter, I might get sick. However, religious affiliation can answer to those facts in adding another dimension to the topic justify an environment-friendly behavior even more as religion forms the underlying values spurring the actions as a response to the external problems. This dimension gives final answers to big questions about the purpose of the world and the sensibility of considering the needs of other people.

E.g. as the Christian faith teaches that every human being is an image-bearer of God, people have the intrinsic conviction that everyone should have the right to fulfill their basic needs. Adding the external fact that people lack sufficient access to water, spurs a concrete, external, not-religious action which in its final step caters to the religious conviction. This notion was tried to grasp graphically in Figure 21. This graphic can very well apply for all other religions or ethics.

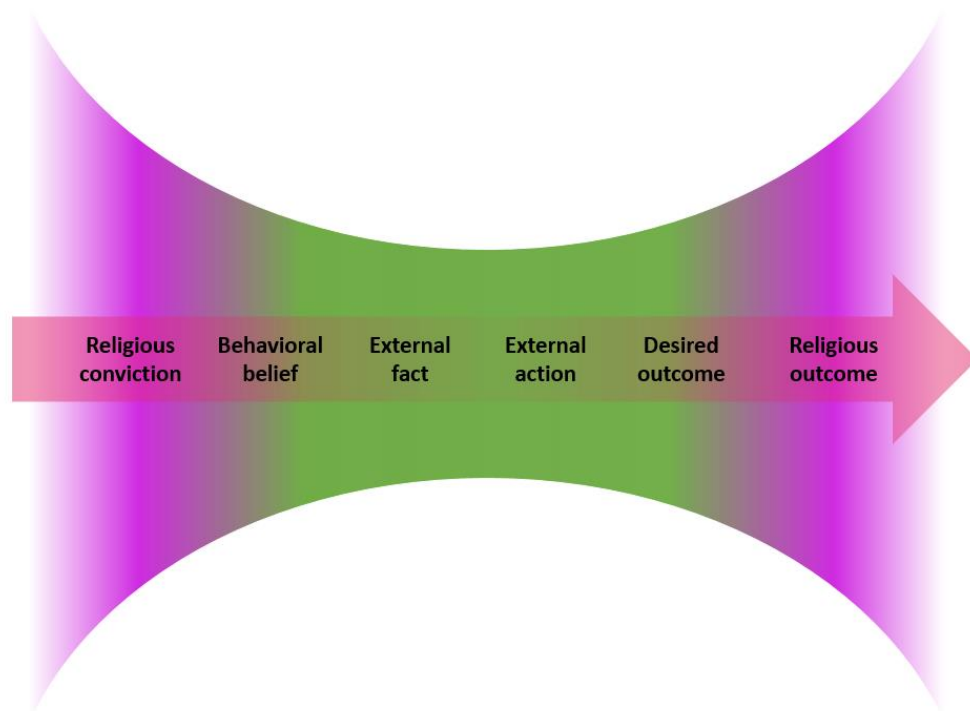


Figure 21: Attempt to visualize how the religious convictions imprint themselves even in external, non-religious actions and outcomes

But without the right knowledge on what is happening and how people might be affected, people might draw the wrong conclusions. As one interviewee put it nicely:

“Because sometimes I’m not aware about thing and I’m doing it wrong .. but when I understand what is right, what is wrong.. eh... eh, I have to take a decision to make what is right.” (Interviewee 8 on 5/18/2019)

Surprisingly one of the most obvious facts why save water was never mentioned: To save money. Either the water bill is not high enough to create a pressure on people or they are not aware of how much they spend and how much they could save.

Currently the religious aspects foremost have an influence on Attitude through the Religion’s characteristics. All these created a positive impact on the attitude, except one notion regarding the world’s end. This fact will be taken up another time in the discussion chapter 7.3.1. Interviewees used mostly an anthropocentric argumentation both from religious and external viewpoints why people should take environment-friendly action. In that regard religious and scientific facts spin one thread: As the natural realm was meant by God to be man’s habitation and to sustain the needs of all

people, knowledge from science shows how environmental degradation sooner or later falls back negatively on humanity. From the analysis the first impression is that religion is more powerful in triggering environment-friendly behavior as it has twice as much intersections with the elements than the external influencers. But since the focus was on explaining the religious influence interviewees and researcher obviously talked more about the role of religion, hence distorting the numerical distribution. It can at least be confirmed that both realms have a considerable influence.

Apart from rather rare reports, the Jordanian society as well as the church community lack a common code of conduct on how to deal with water and the environment. Interviewees have been rarely told about moments or occasions when the religious community or parts of society has exerted a pressure on them to adapt environment-friendly behavior. Even more, since interviewees themselves sometimes got active in educating people or animating them to adapt environment-friendly behavior and receiving also negative reactions, it can be concluded that parts of society are not yet aware of the problems or simply feel not responsible. This debate simply has not yet reached the Jordanian society. There must be an overall change to flip the switch and have environment-friendly behaviors become accepted and popular, and not be regarded as something outlandish.

This conclusion for sure varies in applicability depending on area and the behavior in question. Whereas in small villages with limited water supply it had been reported to have some common mentality to deal sparingly with the water, in certain areas or parts of society in Amman it can be suspected that there is no culture of naming the grievance and talking to people to change their behavior. This also applies for the church communities as Table 5 summarizes.

As most of the behaviors are not requiring a lot of skills, finances, material or time, the perceived behavior control over the behavior in question could be actually quite high and not a lot of support from outside to overcome perceived or actual constraints are required. None of the religious drivers impact the Perceived Behavioral Control positively or negatively yet, however external reasons could play a huge role in impacting people adversely.

From this diagnosis shall be derived activities on how to strengthen the existing cause-effect-chains and how to tie new ones for areas where none or only negative are existing.

7.2. Suggestions and Opinions of Interviewees

Before moving to the ideas developed for future cooperation with Jordanian Christian FBOs, the ideas of interviewees shall be heard on what could be done in their opinion to raise the awareness of people and motivate them to adapt water-saving behaviors specifically and environment-friendly behaviors generally.

7.2.1. Religious

Interviewees commonly also judged the religious institutions as being responsible in bringing change to society regarding environmental challenges. Most of them found it fitting and appropriate to join the religious sphere with the necessity to act on the environmental and water challenges in Jordan. They suggested to develop an environmental theology, teach it in church and to the children in church. They were also open to the idea to have more lectures on the topic, either from the leader or from a specialized person and to join interreligious activities:

“So, churches should play a role also, eh, with the younger generation also, but this is part of being a Christian .. in your life that shows.. taking care of what the Lord has given us, eeh, eeeh, may-, maybe it should be tackled more, yeah.” (Interviewee 6 on 5/7/2019)

“I liked the idea that eeh, you should use the churches and eeeh... eeeh, #y3ni#, eeh, make awareness for people about water and electricity and, eeh, garbage and everything, environment. If you can.. do something, it's really good.” (Interviewee 10 on 5/30/2019)

However, some interviewees also objected to the idea. Their opinions are very helpful in understanding why and how FBOs can work as a platform for behavior change or not.

One interviewee suspected that the topic of environmental protection is mostly addressed by non-Christians which hold a different worldview that portrays humans as evil and destructor of nature. So, she reckoned that having somebody over at the communist gathering to speak about the topic would lead her to be very cautious whether this person is in line with all the other core beliefs of Christianity. Yet, she would be excited to listen to a bible-based teaching on the purpose of mankind in regard of a creation entrusted to them by God:

*“And on the extreme, left, liberal side... And you start seeing environmental issues .. from center over (*she shifts hand to the left side of the table*)... It's unfortunate that you don't see them on the right. But the way environmental issues are addressed on the far left is: Ehm... >>That is the truth of life [...].<< So, environment is most important, and humans are seen as... kind of evil and the problem. And environment is placed, the, the value of environment is placed over value of humankind. And I don't trust that. [...] Because of a lack of integrated mature teaching about the environment, then ... to hear, a, a, a sermon on the environment in church would cause me to really pay close attention to where you are coming from.” (Interviewee 2 on 4/1/2019)*

Some others argued that they think education is much more important and will have more effect than having a religious leader speak about the topic on television. Some others conjectured that other members of the church community would not like the idea of a leader speaking about politics or environment because they would expect a spiritual message from him:

"[The leader] should, eh, he should, eeh.. talk about it on an individual basis and, and .. spread the word .. one by one, not in the church as in the church. I don't think so, no. Maybe he can bring someone to talk about it, eeh, from, eh, scientific, eeh, .. point of view or from.. somebody who is responsible for example minister or, eeh.. But not the [leader], no. I don't think they will accept it from him."

Because they expect more, like, the spiritual?

Hm... Yeah" (Interviewee 10 on 5/30/2019)

That analysis falls in line with another survey the researcher conducted during her internship time at the GIZ with a group of about 40 people. One survey question asked if the participant thinks that water saving is a religious responsibility. About 80% of the participants answered with "Yes" giving several reasons. Only four people ticked "No", one writing that religious leaders should focus on religious issues (Burger 2018). To that notion one of the interviewees agreed full-heartedly:

"Eeeeh, also because if you believe, before the dark ages the church was involved in everything .. including water and eh, politics, I don't want the church to go back to [...] the middle ages, dark ages, yeah. Because it was involved in many aspects. I want it to keep its focus on ... eeeh, religious, eeeh conquests, not real conquest, so eeh... I don't believe it's [the church's responsibility], but it can aid like by providing audience, eeeh, by trying to appeal to their ... good side, by, because they trust the church, but it's not directly its responsibility." (Interviewee 1 on 2/21/2019)

7.2.2. External

People came up with various ideas on how people could be motivated in a non-religious, external way. Most of them rated education as a key factor to make people be aware of the environmental challenges and the water scarcity in the country and adapt environment-friendly and water-sparing behavior. That included incorporating the topic of environmental challenges into the school curriculum but also to have more awareness campaigns and lectures about the water system in Jordan for the general society as well. Another participant added that it would help her to know how she influenced the water resources in her daily behaviors because she didn't know much about the sources of water and the supply. Some also stressed the responsibility of the families to teach their children from a young age to adapt water saving measures.

One aspect which was not environmental but what people perceived as a flaw was the lack of societal belonging which leads to indifference to the needs of others as soon as the own need is satisfied. People wished that there would be activities and programs to increase the societal belonging of people and have them invest in public goods and not only look out for their own interest. Along with that one interviewee stressed that all the environmental problems need collective efforts to be tackled successfully and hence all governmental and religious institutions as well as social groups need to work together.

Some saw the government as the institution that could mitigate the scarcity, by either providing more water infrastructure like dams, by fixing leakages, developing long-term plans or by having better agreements with adjacent neighbors about water resources. Some also suggested to introduce more rules, regulations and punishments to foster an environment-friendly society.

7.3. Derived Suggestions for awareness-raising among Jordanian Christians

The needs for action from Table 5 can be summarized as following:

1. Fortify the interconnections that create positive attitudes and properly deal with those creating negative ones. Positive influences from science and religious drivers on Attitude are already existing but should be established stronger and be spread more among Christian FBOs.
2. Foster a culture of environment-friendly behavior among Christian FBOs to increase Subjective Norm
3. Discuss and deal with external, negative influences on the Perceived Behavioral Control by means of spiritual and external arguments

The following suggestions are specifically targeting the Jordanian Christian FBOs, however the list of people, institutions or organizations finding helpful inspiration in them is not exhaustive. Some of the elaborated recommendations might very well apply for other religious communities or the general society as well.

7.3.1. General recommendations for cooperating with Christian FBOs

7.3.1.1. Accept the sovereignty of the religion and its focus on the spiritual

Considering the insights that were gathered in the research, it is recommendable for all secular NGOs and GOs to leave the religious teaching content 100% in FBOs responsibility. Creedal believers have a fine antenna for what is coming from a devout heart and what is only said to polish one's image or is even infiltrated from outside:

From an outside perspective the institution church and its community are merely a worldly entity with an organizational structure consisting of a group of people like any other. But believers will not view it that way. For believers there is something divine, godly or spiritual in the act of worship, in the community and its teachings. From their perspective worldly organizations do not have the right to mess with this sphere and believers will react allergic if they sense that their faith is used for something else than the divine. This was also noticed in one unofficial discussion with a Muslim friend (Anonymous, Date: 3/18/2019).

The task of the NGOs and GOs is then to stay on the ground of science or the worldly sphere. It can identify and approach individuals and communities they would like to support and offer them the space to sort it out on their own before the FBO will respond to whatever the NGO or GO is aiming to do.

At the same time members might also get suspicious if the leading instance of the church community is getting involved too much or too fast into worldly topics without having the community prepared with a religiously grounded justification for what they are doing. The following statement shows that the involvement of religious leaders in worldly topics can be tricky:

“I respect many priests, I respect many #scheich#, leaders, there is many, many, many very, very kind person and work from their heart. But there are, sometimes, there you will find agenda: Okay, I will, eeeh, go to TV or social media or something and I will say that. But you can feel if that person is talk from heart or no.” (Interviewee 7 on 5/9/2019)

On the other hand, experience of one interviewee shows that leader can become very engaged in worldly topic because they embody the engagement with their life (Interviewee 9 on 5/29/2019). There are two ways it can work: That the FBO offers a mere platform for worldly individuals or institutions to speak about worldly things or to have a devout leader being on fire for a worldly topic motivated by a religious reason.

7.3.1.2. Don't overstretch and don't overestimate the influence of leaders

Leaders can have a tremendous influence as they stand as a role model before the community, decided on the topics to teach and uphold a certain code of conduct within the community. Their trustworthiness results out of their professional dedication to the spiritual office, but it also depends on the perceived level of devoutness to the faith.

But the leader's influence is also limited since an average member spends 1-2 hours a week only in indirect contact with the leader. The intensity of the leader exerting influencer on Subjective Norm of people is hence incredibly small. The influence of a leader can be greater if they spend more time with their parish apart from service.

Adding to that not all members look at the leader as the infallible role-model and a leader can lose trustworthiness when they get involved into a non-religious topic. That's why some leaders invited specialized people for non-religious topics because they felt their knowledge might not be sufficient and the congregation might suspect an agenda for the leader to talk about a non-religious topic.

Hence, much more focus should be put on religious groups or even the family forming the smallest nucleus of change. Those members attending some group within the community felt that people had an influence on each, by sharing life together, inspiring each other or by being an example of Jesus to everyone else. It is much more probable that a culture of environmental behavior can be discussed and practiced there. One interviewee stated that she found friends more influential in correcting her behavior than the leader of the church, because she was skeptical about the leader having some kind of agenda from the government whereas a friend has not (Interviewee 7 on 5/9/2019).

Interviewees experienced (and some do still today) their families as a group of role-models to teach, to show or to inspire them how to translate the faith into actions. The family can be a place of discussions and where faith is lived out. Much more we-time is spent with the family than with the leader.

7.3.1.3. Understand and respect the arguments faith supports

It is important to understand the focus of any belief to find a convincing motivation for people to carry out the behavior. Chapter 6.2.1 deals with the influence of religious drivers on all kind of intentions. This chapter holds valuable information on the focus of Christianity as people perceive it. It is a good advice for NGOs and GOs cooperating with Christian FBOs to be aware of exactly those arguments which most of the times center around the welfare of humans. Environmental protection and more specifically water saving has one big purpose for Christians: to honor God who created all humans in His image that deserve to share in the blessings of this world. Wasting water must be displayed as a social injustice even if it is not perceived as such directly. Only much later come other religious motifs as the intrinsic value of every living thing as a creation of God which are worthy of protection.

Catering to this argumentation line for example when giving a mere scientific presentation about e.g. the effects of water scarcity means stressing out the negative effects on people and how environmental protection leads to the protection of human lives.

Furthermore, religious leaders could try to make people think: How do I honor God when treating the resources, He has provided, with care? Another try could be given to copy inter-relational teachings of the Christian faith to the sphere of mankind to nature and see if that works theologically. This is something which one of the leaders applied himself:

“The authority God gave us over earth. I... full-heartedly believe this means that I need to care of it. Ehm, Jesus came, when he .. when he came as a teacher and a king, he actually washed.. the fe-, the feet of the, of the disciples to say this is the way we need to make, when you, when you see yourself bigger or more important person or highest, eh, position, that's mean you should be more able to serve others. So, if we are in higher position.. eh.. have, eeeh, of having authority over earth, so we need to take care of it, we need to serve it.” (Interviewee 8 on 5/18/2019)

He used the telling of Jesus washing the feet of the disciples, that can also be interpreted as an reflection on how leaders are meant to serve the members of congregation or more generally how people should serve other people, and transferred the meaning to the mankind-nature relationship.

One can also deliberate if religiously propagated values such as modesty and love can also be expanded to the relation of nature. Modesty to use only what is needed and love to cherish and care for the surroundings.

7.3.1.4. Be aware of denominational differences and preferences

Christian FBO does not equal Christian FBO. As already described in chapter 7.1.1 last paragraph there might be differences among denominations or church communities that need to be identified and understood.

For the most obvious difference identified in this research that some communities look to the Bible as ultimate guidance and others rely somewhat on leaders to interpret the Bible and stand as more powerful role models, there should be a tailored approach. For one group a deep discussion on the Bible teachings on eye-level with the leader will be more convincing whereas for others it is important that the leader is taking the first step in bringing in the topic to church and encourage on-going projects and examinations within smaller groups of the community.

7.3.2. Encourage to develop and teach consistent environmental theology

As this research has shown the Christians interviewed, members and leaders, have the main arguments already sorted out why environmental concern and water efficient usage is also of concern for a believing person. Since most of the members interviewed stated they have never heard about this topic in an ecclesial context though, it is about time to encourage more leaders to do so or do it more frequently. There are plenty of arguments brought forward from the interviewees and distilled down in their essence in the analysis of this research to inspire people in charge of the sermons and services. Atop of that, the GIZ has already commissioned Jordanian Christian leaders to sum up ideas and has created a workbook on that topic (GIZ, Ministry of Water and Irrigation Jordan 2017). At the same time, leaders should take care to present a spiritual message and not do the jobs of scientist, as this would cause irritation or even incomprehension for some members.

It could be helpful starter for some communities to refer to already existing teachings so they do not have to come up with something brand new which might be subject to suspicion. The encyclica *Laudato Si'* of Pope Francis hence will be a very good tool for Catholic churches and the efforts and teachings from Patriarch Bartholomew for the Orthodox churches. The Orthodox church can also fall back upon its rich stories about saints from the Middle East concerning miracles and doings concerning the natural realm e.g. Saint Sabbas (St. Sabbas the Sanctified Monastery in Jerusalem 2002).

Another religious creation-issues which leaders should keep an eye on is the question of what will happen to the physical world at the world's end. Until now only one interviewee shared the opinion that environmental protection is not relevant for his faith because earth is something temporary and subject to destruction from humans and then from God at the final day. Leaders should have a profound answer to this question, and it must be answered honestly from what believers hold true as sources of faith. This brings up the second point.

By that hopefully, more people would get in contact with Environmental Theology and gain a strengthened Attitude sourced by both religious and external reasons towards the topic. A slight increase in Subjective Norm perceived from the leader could also take place.

7.3.3. Identify religious communities or individuals that already are engaged and support them increasing their area of influence

The research showed that concern for the environment or the scarcity of water has not yet reached the public but also not the religious debate. However, there were examples among religious institutions or individuals showing concern and care motivated by a religious reason. Instead of inventing the wheel all over again, it might be fruitful to identify communities, groups or individuals within the community that already show more concern than the average and support them in spreading their know-how and hence use the potential already given.

This could be done by starting with one group of people who show an interest in the topic and decide to work on that within the community. By that there are a few number of people upholding a certain code of conduct with which others might feel the desire to comply. That would cater to the lack of Subjective Norm within the community.

Stating again what has been said before, a religiously based justification will be more effective if people sense that it is coming from heart which is a given when people were engaged in resource-efficient behavior before a NGO or GO enters the field. Adding to that religious persons that potentially might be coming from the own community will gain the trust of others much faster than outsiders and hence create more impact.

7.3.4. Foster exchange among communities from different parts of society

Since some of the interviewees showed hints that the water supply system does not reflect (anymore) the water scarcity in the country, it might be an eye-opener to get to know people or communities from other parts of society which are not as privileged and have to use the water sparingly.

The purpose would be that people through friendship or continuous exchange with other communities keep in mind the problems of others and that this would affect them in the way they behave. Additionally, the creation of a feeling of societal belonging should be fostered during the gatherings. Such a project could also be carried on an interreligious level to tie more connections between different parts of society.

Important is to be very careful in not to enhance conflicts as common stereotypes might arise. Probably it would be best to invite two different communities for the same event where they all find themselves on the same level and then continue with more field visits including some small co-operations on tackling a common problem.

For example, Youth Groups from two different church communities could organize a joint event on collecting waste at popular picnic sites, have small presentations and group discussions or identify ways how to support the local community. If the connections have grown tight one could also consider visiting each other, having service together and take turns in doing some activity for the on-site community while getting to know the lives and challenges of others. These suggestions would cater to the lack of a positive Attitude and diminish a negative Perceived Behavioral Control.

7.3.5. Tap in the knowledge of older generations

Just as an exchange among different parts of society could be eye-opening, it might be interesting to unlock the knowledge of older generations when it comes to use resources efficiently. As the research showed interviewees could remember their parents or grandparents in the landside being very prudent with everything they had and passing the manner on to their children. As the younger generation in Amman usually grows up with more privileges and more resources to use, some also might develop a carelessness for them since they never knew restrictions.

The older generation can also show-case that living resource-efficiently is even possible today and pass on old techniques on saving water, reducing food wastage or repairing. By that all three elements could somewhat be influenced: Attitude due to the appreciation of the resource in the past life of elders, Perceived Behavioral Control by showing and enabling adolescents to resource-prudent behavior and Subjective Norm by giving elder people a voice.

7.3.6. Spread scientific facts

The Jordanian society is ready to move to the next level of awareness. People commonly know about the water scarcity, but they do not know enough details to take proper decisions. How much is the water price? What are the governmental subsidies for the water? Where is the water coming from? How much energy is used to pump the water? How are the ecosystems affected? What is the level of the groundwater aquifers? What can I do if I see a leakage in the street? How much water is used for growing crops? Why does one good season's rainfall not undo the general problem of scarcity?

Potentially, the awareness could also be expanded to the water footprint of products. This would enable people to have a solid Attitude towards different measures and behaviors and confront them. The aim is to give access to basic, transparent knowledge on how the water system works in Jordan. This could also be applied for the waste sector or the energy sector.

7.3.7. Encourage people to be the factor of change and speak up

As one diagnosis of this research is that both the religious communities and the Jordanian society usually lack a culture that is fostering environment-friendly behaviors and often also water-sparing measures, it is necessary to create such a culture, a culture for which it is normal to act resource-efficient in all aspects of life and hence radiate a Subjective Norm to other parts of society.

Church communities can start to be the nucleus for change within themselves. Cooperative leaders and individuals can pick a topic of concern and pursue the members on a religious basis to think about the implication of this topic for their own life. Workshops could help to foster discussions and encourage families to change their behavior at home for example. If enough individuals have made changes at their homes, they can decide to do it collectively and to make it a standard for the way things are dealt with at the church community, during events, meetings of groups, facility management and service.

If this step is taken as well, people can be encouraged to address their surroundings: their neighbors, the supermarkets they go to, their workplaces. One interviewee showed that it can be done if one has the persistence and eagerness to make a change.

7.3.8. Stress the personal benefits

As it was also diagnosed not everyone will find it desirable to work on something they hold as the responsibility of the government or of other parts of society. Their attitude can be shifted to improve their own situation if the prospect of saving resources for the common good of all people or future generations is not an incentive for them. Saving water or saving energy is coming with the direct benefit of reducing one's bill and hence the factors sourcing a negative Perceived Behavioral Control will be incapacitated.

7.4. Values and Limits of the model

7.4.1. Limits

During the research the process of asking questions, coding, analyzing, describing and discussing was following the model adapted from of Ajzen's Theory of Planned Behavior. At the outset of the research the model was predestining the frame for the results. In retrospective the reality of people's lives imprinting themselves in words and hence in the results are crossing the expected framework at different points.

The theory of Ajzen is explaining the motivations of a person to carry out a certain behavior. In the research people were often talking about a wide range of behaviors, general behaviors, environmental behavior and specifically water saving behaviors. Applying the model for this wide range of actions and respective elements and influencers became difficult to grasp mentally since every behavior might be subject to

different behavioral and normative beliefs underlying the attitude and the subjective norm. This might be the reason why the common researches always deal about one specific behavior (see chapter 3.2). Ajzen's theory gets complicated and multi-layered when one tries to apply the same standard to too many different behaviors in question. Initially, Ajzen's theory was also meant to learn important drivers of people's behaviors for very important one-time-decisions. However, Ajzen insists that the Theory is also applicable for habitual behaviors (Ajzen 1985).

Sometimes it was not clear what kind of outcome influenced the Attitude of people because there was often a nexus of arguments and motivations. The same applied for the Subjective Norm. From what people had said it could often be well assessed to which code category it must be assigned, but often there was a vagueness that seemed not to be graspable by the model.

Furthermore, the definition of the element of perceived behavioral control had to be modified to the research's case or a new element or type of constraint be introduced to capture demotivational factors which never hindered people actually from carrying out the behavior nor did they truly fall under the category of perceived constraints as those would not relate to the behavior in question but the doubts whether the behavior is expedient.

7.4.2. Values

Still, the model adapted from Ajzen's theory of behavior showed the potential to also explain the influence of religion on the behavior of people. The overall research showed that after some twisting and not applying Ajzen's definition of the elements a 100%, the motivations and elements from religious influencers could be sorted relatively well. That shows that faith and religious communities do work alongside of the model. This is a good result for an explorative study on which other studies can built on.

Furthermore, it proved to be a helpful tool in identifying gaps of influencers and also to correct an imbalance of focus of the research as it was noticed during the process for example.

As the model could be used for Christian faith, there is no constraint that the model could also be used for other religions and be filled with meaning for diverse places, topics and groups after an explorative study.

8. Conclusion

8.1. Major findings of thesis

This research aimed at exploring the interconnections between the Christian faith and environment-friendly behaviors, focusing on the rate of water saving measures among the Jordanian society and the religious and external motivations for them. An explorative study was necessary as there had been no thorough explanation or model on this interconnection provided by the scientific community.

The Theory of Planned Behavior of Ajzen was modified to cater to the need of identify existing, missing or potential influences of religious drivers on water saving behaviors. When not applying the definitions of Ajzen's theory strictly, but some more flexible definitions for the different components of the model, it was a good first shot to map and sort the different motivations for interviewees to adapt environment-friendly behavior like water saving measures.

The religious influencers postulated in the beginning of the research were 1) the religious convictions a person had stemming from the Bible, the Christian worldview and belief about God's character, 2) the religious community the interviewee belongs to and 3) the influence of leaders on the participant. Additionally, also the external, non-religious factors mentioned by the interviewees like e.g. scientific facts were included to complete the understanding.

Following conclusions can be drawn from the research: First, the most common religious influencer people name as most important in guiding their general behaviors is their own personal belief providing them with a worldview, a description of the character of God and a basis of values to measure one's action by. The influence of the leader and the community, however, are minor. Yet, the probability is high that they have a greater influence than analyzed in this research as the interviewees were not requested to describe their influence regarding a specific behavior in mind.

Secondly, religion can have an influence on environment-friendly behavior generally and water-saving behaviors specifically. However, the research showed that whereas the personal religious convictions showed a great influence, the influence of leaders and community were minor meaning only existing in embryonic form and not employed purposefully. Especially the conclusions people drew from the creation narrative in the Bible kicked off the argumentation chain why people should not be indifferent to environmental degradation. People mostly named anthropocentric purposes as maintained livelihoods, protection of lives and the right of every human to have a share in the resources of the world as the justification for environment-friendly action. Generally, people were open for faith-based awareness-raising.

Thirdly, scientific facts about the environment and water situation in Jordan and their implication for the people in Jordan are essential to spur action. Interviewees showed basic knowledge on the water scarcity persisting in Jordan and other environmental topics as climate change and biodiversity loss. However, there is still room for the spreading of scientific facts among the population of Jordan, especially details about the water infrastructure.

People felt also influenced by the political, governmental, economic and societal situation. Those were mostly creating a negative influence on the intention to carry out water saving behaviors. Corruption, lacking engagement from the society to act on environmental challenges and political tensions with adjacent neighbors keep the minds of Jordanian occupied. The sensitive water situation is only coming as a second-degree problem.

Different recommendations and suggestions for approaches were derived from the insights gathered from the analysis of interviews. Proposed measures aim on encouraging church communities to deal about the topic of water scarcity and the necessity to behave water-sparingly, spread more scientific facts, foster a societal belonging and exchange among different communities and age groups, and create a culture of concern for the environment.

The project “Improvement of communal water efficiency through cooperation with religious authorities” commissioned by carried out by the GIZ on behalf of the BMZ has set out on a good path by encouraging their respective partners in Jordan to incorporate the topics in school curriculum, to develop religious material on water topics and to train not only leaders but also group leaders within religious communities. From the members interviewed however, most of them have not got in touch with the project yet.

8.2.Recommendation for further researches

Chapter 4 in which the process of this research was discussed delivered most of the points of challenges that were formulated as recommendations in this chapter for future research that aims to carry out a similar study on the influence of religion in different contexts of culture or other environment-friendly behaviors:

- 1) Since this research proved that faith has an influence on general behavior it is recommendable to omit this part for Christianity in future research and rather focus on one specific action or at least a specific set of behaviors as much as possible.
- 2) Gather good insights of the frequency of the behaviors under investigation within the community. Is this behavior not existent? Do some people do it? Are the problems seen (e.g. pollution, water wastage) really caused by the behavior in question or are there also other factors? Base the interview guideline on the knowledge won.

- 3) Ask concrete questions without offending people when researching about the connection of faith with environment-conserving efforts: Does the Bible command you to conserve water? Do you think God expects you to carry out conservation measures? Formulate the questions in such a way that the probability is high the answers will fit into one of the categories Attitude, Perceived Behavioral Control or Subjective Norm.
- 4) Reverse the order of questions when using the Theory of Ajzen to learn about the influencers: Instead of investigating the influence of religion on the elements Attitude, Perceived Behavioral Control and Subjective Norm and then in the next stage trying to draw another conclusions on how those elements had an influence on the actual action, it is more recommendable to trace the cause-effect chains starting from the action under investigation. Figure 22 visualizes the phenomenon observed in this research. The red arrows signify the uncountable ways people might describe the influence of faith and the countless pool of other drivers on the elements forming diverse intentions for a countless number of behaviors among which is just one or a defined set of behaviors of interest to the research.

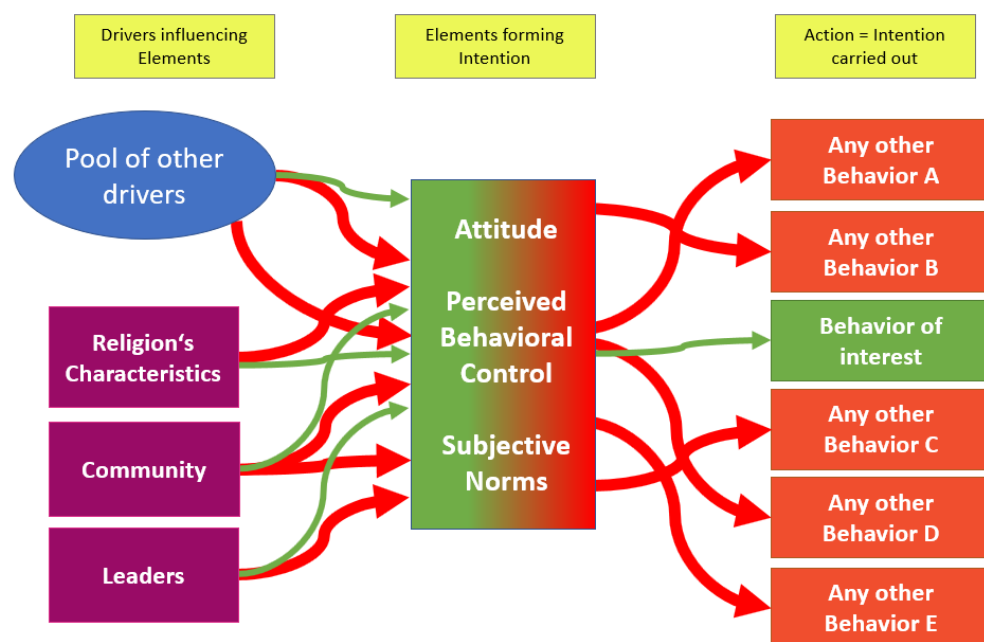


Figure 22: Visualization of the problems occurring if the research is started from the investigation of the influencers

Instead of untangling the web of all the threads gathered and focusing on the ones that are of interest, the research should start from the ending point and move the way backward.

- 5) Shrink the scope of the study to a specific group of people to receive less general and more meaningful results from the research. Potentially there could be more meaningful insights if one focuses on one of the two largest Christian Denominations in Jordan: Orthodox and Catholic.

- 6) The benefits and downsides of a researcher being affiliated with the same faith as the interviewees had been discussed before. The competence of a researcher will be defined by the ability to harvest the benefits of the affiliation while reducing the potential negative impacts on the research. It is recommendable to focus on fulfilling the role of a researcher during the interview and only after the interview take up the curiosity and excitement of a believer again.

Secondly, from the insights of this research other questions emerged. These new gaps of scientific knowledge are the following:

- 7) This research gave first insights into the faith-behavior-correlation of Christians in Amman. However, it just provides a tendency not an exhaustive, statistically secured result. For this, a quantitative research with questionnaires has to be carried out.
- 8) Since the majority of citizens are Muslims and not Christians it would be interesting to gather insights on this religious group. Knowledge fathered from this research might apply for both groups, but others might be totally different, and both could be influenced differently by the elements forming behavior.
- 9) As the researcher was usually approaching Christians from the more privileged parts of society in Amman, the probability is high that new insights can be gathered if a research is focusing on the underprivileged areas of Amman that also suffer under an aging infrastructure.
- 10) At the same time, it would be interesting to understand better how average religious people feel that their faith, the community, family, friends and the leaders are influencing them in their everyday life as most of interviewees of this research can be described as very religious on average.
- 11) It would be interesting to pinpoint how much the average Jordanian household could contribute to water saving depending on governmental supply schedule, domestic supply infrastructure and habits. A lot of obvious water wastage could also be due to real leakages of the supply system and not be caused by excessive out-door water consumption meaning that the society appears more wasteful than it truly is. Equally interesting is how much money could be saved per household when shifting from normal to reduced water consumption.

9. Excerpt list of interviewees

Interviewee	Pages of excerpts
Interviewee 1:	43, 47, 53, 55, 73, 90
Interviewee 2:	39, 40, 41, 43, 51, 55, 67, 70, 71, 75, 83, 89
Interviewee 3:	40, 42, 43, 44, 47, 48, 52, 53, 61, 66, 70, 71, 80
Interviewee 4:	42, 43, 49, 50, 51, 53, 54, 56, 63, 75
Interviewee 5:	44, 45, 47, 50, 52, 54, 63, 69, 85
Interviewee 6:	41, 44, 46, 47, 50, 51, 52, 57, 70, 74, 89
Interviewee 7:	42, 43, 47, 53, 56, 57, 71, 85, 92, 93
Interviewee 8:	40, 41, 46, 47, 48, 50, 51, 53, 55, 57, 61, 66, 69, 70, 73, 74, 87, 94
Interviewee 9:	44, 46, 47, 51, 54, 55, 64, 67, 70, 92
Interviewee 9a:	83
Interviewee 10:	41, 44, 45, 47, 49, 52, 54, 57, 61, 64, 68, 71, 77, 82, 83, 85, 89, 90
Interviewee 11:	41, 44, 51, 57, 64
Interviewee 12:	44, 46, 47, 51, 52, 62, 64, 71
Interviewee 13:	45, 47, 52, 68
Interviewee 13a:	47, 68
Interviewee 14:	45, 50, 51
Interviewee 15:	40, 44, 45, 46, 49, 57, 62, 71, 75, 82

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Interview with Interviewee 9, Date: 5/29/2019. Amman, Jordan: Rising Awareness and Motivation for Water Saving through arguments provided by faith. Interviewer: Burger, Sonja.

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Interview with Interviewee 10, Date: 5/30/2019. Amman, Jordan: Rising Awareness and Motivation for Water Saving through arguments provided by faith. Interviewer: Burger, Sonja.

Interview with Interviewee 11, Date: 6/1/2019. Amman, Jordan: Rising Awareness and Motivation for Water Saving through arguments provided by faith. Interviewer: Burger, Sonja.

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11. ANNEX

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I. Interview Guidelines

a. Leader

Table 6: Version 1.0 of interview guideline for leaders. The first column indicates the motivation of the question, the second column holds the question asked.

Making the Interviewee Feel Comfortable/build trust	
Get to know them	Tell me a little bit about yourself, for example: Where does your family come from? Where have you grown up? What was your motivation to become a church leader?
Learn about their denominational background	For which churches are you responsible? Since when? - Which denomination is that?
Understand how they could influence	What kind of activities are included in your work? Describe a typical work day.
Their influence in Church	
Get their definition of Christianity in a nutshell	If you need to tell someone who never heard about Christianity, how would you explain the very core of your religion? What do you think is Christianity about?
What is the core to be a Christian?	What would you say are the features of a Christian? / Kind of behaviors?
Directing the conversation to behavior. In what aspects of your life do you see your faith giving you directions for a certain behavior? Imagine a normal day. You wake up in the morning and follow your routine. When does your faith kick in?	What aspects of your life does your faith influence?
Understand what they think is their task, responsibility and authority as church leader	With which attributes would you describe your position as church leader?
Learn where they see ways to influence people	How can you shape the thoughts and behaviors of your parish?
	What is the role of the believers in the church?
Ethical influencers seen by leaders	From whom or what else can people in church derive spiritual inspiration for how to live?
	What role has the Bible in the life of a believer? - How does it direct the actions?
Theological Discussion about environmental problems	
To make a smoother transition and also give them a voice.	Could you just mention shortly which are major problems for the Jordanian society in your opinion?

Bring in the topic of sustainability in Jordan	Do you see any problems related to nature, resources or wildlife in Jordan? IF YES: Please, elaborate a little bit about one problem: - How does it affect you? - What do you do about it? - What is your motivation to do sth. about it?
	I study a lot about water. And you always hear: Jordan is poor in water.
Learn where they see the main problems: For people, for future generations, for economy, for nature (Jordan Valley, Azraq Oasis)	What do you know about the water situation in Jordan? - How does it affect the country? - How much do you think society knows about it
	Who do you think is responsible to act on the just mentioned issues?
	Do you see also a responsibility for the churches in Jordan? - How? To which extent? - Explain me this please: You said Christianity is about XYZ. What has that to do with water? - what do you think is the motivation for Christians to address this problem? - What could make it hard for them to care about these problems?
Theological Discussion about Environment	
Laudato Si', Christian for Mountains, Green Patriarch, Websites, Ecumenical Council	Do you know about other churches, church institutions or simply Christian Organization addressing environmental issues (inside or outside Jordan)? - e.g. food, clothing, water, climate, waste
Learn about arguments for or against, implications in Biblical Scriptures about Nature	What is the purpose of nature like animals, forests, natural resources from a religious perspective? - So, what does this mean how we see nature? - does God care about animals, forests, ecosystems? - do they have an intrinsic value? Does it e.g. matter if a species goes extinct if it does not affect us?
Learn if the Judgement Argument is an obstacle.	What will happen to this planet, to plants, animals and oceans, if the Judgement Day comes? - Will it make a difference how we <u>treated</u> nature?
	<u>I would like to hear your opinion on the following excerpt from a writer in 1967:</u>

<p>Reading a collection of quotations by american Lynn White, 1967</p>	<p>"(...) What we do about ecology depends on our ideas of the man-nature relationship. (...) Christianity made it possible to exploit nature in a mood of indifference to the feelings of natural objects. More science and more technology are not going to get us out of the present ecologic crisis until we find a new religion, or rethink our old one. (...) Hence we shall continue to have a worsening ecologic crisis until we reject the Christian axiom that nature has no reason for existence save to serve man."</p>
--	---

Table 7: Version 2.0 (from 24th of May onwards) of interview guideline for leaders. The first column indicates the motivation of the question, the second column holds the question asked.

Making the Interviewee Feel Comfortable/build trust	
Get to know them	Tell me a little bit about yourself, for example: Where does your family come from? Since when do you serve in this church?
Understand how they could influence	What kind of activities are included in your work? Describe a typical work day.
Their influence in Church	
Christianity in a nutshell.	What would you say is Christianity about?
Character Traits and Actions to understand the main argumentation logic for Christians in their behavior	What kind of character traits should a Christian have and how should a Christian act, in the ideal case?
Ask for influencers of behavior	Speaking about actions and character traits (you just mentioned): Who or what tells us that this how a Christian should be?
Understand why those influencers are of importance to the people.	Referring to the "sources" (Who and what): Could you explain to me why they have this impact on people to change their behavior?
Understand what they think is their task, responsibility and authority as church leader	What is your role as a church leader in regard of the community you lead? Attributes? Why do you think people listen or don't listen to you?
Learn where they see ways to influence people	How can you shape the thoughts and behaviors of your parish?
Understand what leaders think the laity members should do.	What is the role of the members in church? Speaking about the differences: What is their unique role which you cannot fulfill?
Ask for people who they look up to (PBC)	Once you have been just a member too. Who has influenced you in your religious journey? Is there maybe someone who is influencing you right now?
Ask for people who they look up to (PBC)	Why have you looked up to those people? Why did you find them inspiring?
Other influencers seen by leaders	From whom or what else can people in church derive spiritual inspiration for how to live?
In case the Bible did not come up	What role has the Bible in the life of a believer? - How does it direct the actions?
Theological Discussion about environmental problems	

Bring in the topic of sustainability in Jordan Mismanagement	I know Jordan is having major political and social challenges. But do you see also any environmental challenges in Jordan?
Learn what kind of scientific facts they know. Source of water, state of ecosystems?	<p>What do you know about the water situation in Jordan? Do you think it's true that Jordan is poor in water?</p> <ul style="list-style-type: none"> - How does "the poverty" affect you in your normal life? - how does it affect the church? Do people approach you and tell you about problems regarding water?
Check if they see a connection between their faith and the behavior. But: If they don't see a problem, why should the church care?	<p>Do you think it's the church's responsibility to say something to this topic?</p> <ul style="list-style-type: none"> - <pick up whatever is answered here> - what should Christians focus on instead?
	<p><Lead the discussion depending on whatever people said before> potential topics:</p> <ul style="list-style-type: none"> - interconnection religion & environment - counter arguments - what they do to mitigate water scarcity in church - reasons for unaction in society - knowledge about Christians/ church leader making environment a topic (e.g. Pope Francis) - purpose of nature, end of days

b. Members

Table 8: Version 1.0 of interview guideline for members. The first column indicates the motivation of the question, the second column holds the question asked.

Making the Interviewee Feel Comfortable/build trust/ get to know their background	
Get to know them	Tell me a little bit about yourself, for example: - age - work/studies - family
Learn their practiced denomination, Learn about how long they had time to become a part of the community	To which church do you go currently? - Which denomination is that? - Since when do you go to this church on a regular basis?
Learn if they are actively involved in the community. Meeting other people in church?	Besides attending the service, are you participating in any other activities like Youth Group, bible study groups, music group, help preparing the service, etc?
General Religious Influencers - Influencers in General	
Christianity in a nutshell.	What would you say is Christianity about? What would you say are the features of a Christian? / Kind of behaviors?
Directing the conversation to behavior. In what aspects of your life do you see your faith giving you directions for a certain behavior? Imagine a normal day. You wake up in the morning and follow your routine. When does your faith kick in?	What aspects of your life does your faith influence? What is the role of your christian faith in your life?
Ask for influencers of behavior	Where do you find inspiration for how to live, behave and act as a Christian? - Why does those sources speak to you?
Ask the previous question from a different angle	In religious terms: Who are what has the right to say to you what is right and wrong to do? - Why do they have authority?
Ask directly about the role of the Church Community	What role has your church community for you? (Universal Community?) How does it help you in your faith? How do it support you?
Ask directly about the role of the Church Leader	Which role has the church leader for you in a spiritual sense? What makes a good spiritual leader?

Let them pick a topic of interest and elaborate on that	
To make a smoother transition and also give them a voice.	Could you just mention shortly which are major problems regarding the Jordanian society in your opinion?
Bring in the topic of sustainability in Jordan	Do you see any problems related to nature, resources or wildlife in Jordan? <u>IF YES:</u> Please, elaborate a little bit about one problem: - How does it affect you? - What do you do about it? - What is your motivation to do sth. about it?
If they do not have picked the topic by themselves...	
	I study a lot about water. And you always hear: Jordan is poor in water.
Learn what kind of scientific facts they know. Source of water, state of ecosystems?	What do you know about the water situation in Jordan? - How well do you think other people are in informed? - Has anyone ever talked to you about this?
Know about their apparent effects: People, nature, economy, peace?	What are consequences for the country? - what are consequences for you?
See what measures they think of firstly when they are asked about mitigation of water scarcity	What do you think can be done about this problem?
Learn if they also see a lever for them to pull	Do you think an individual can do something about this problem? - What concrete measures? - Do you do so? - What are constraints you face when acting on this?
Check if they see a connection between their faith and the behavior. Religious reasons for action on environmental problem? Is there a religious motivation for you to do something about this problem?	<u>If they act on it:</u> Do you see a religious reason for you to get involved in solving the problem? MAKE THEM TALK HERE
Check for the interconnection between faith and environmental problems. Does faith say sth. About these problems.	<u>Maybe skip this question, if they don't act on the problem, because you could embarrass them:</u> Does your religion say something about using resources efficiently and protecting nature?

Would they find it appropriate or necessary	<p>What would you think if the water crisis would be made a topic of discussion in your church?</p> <ul style="list-style-type: none"> - in what context would you find it appropriate? Sermon, community gathering? - is it a responsibility of the church as a member of Jordanian Society?
Understand how they see their church members acting on the same problem.	<p>Do you know about other members in your church acting on those problems?</p> <ul style="list-style-type: none"> - What do you think about them?
	<u>Putting all what was discussed until now in the perspective of:</u>
What purpose is mentioned: Use for us, Lord's praise... What value is ascribed to creation?	What's the purpose for this earth which you derive from your faith?
Learn where they see the justification for acting or not acting.	What do you think will happen to this planet in the future when Jesus returns?

Table 9: Version 2.0 (from 24th of May onwards) of interview guideline for members. The first column indicates the motivation of the question, the second column holds the question asked.

Get to know them	
Get to know them	Tell me a little bit about yourself, for example: - age - work/studies - family
Learn their practiced denomination Learn about how long they had time to become a part of the community	To which church do you go currently? - Which denomination is that? - Since when do you go to this church on a regular basis?
Learn if they are actively involved in the community. Meeting other people in church?	Besides attending the service, are you participating in any other activities like Youth Group, bible study groups, music group, help preparing the service, etc?
Ask about spiritual influencers	
Christianity in a nutshell.	What would you say is Christianity about?
Character Traits and Actions to understand the main argumentation logic for Christians in their behavior	What kind of character traits should a Christian have and how should a Christian act, in the ideal case?
Ask for influencers of behavior	Speaking about actions and character traits (you just mentioned): Who or what said to you that this how a Christian should be?
Understand why those influencers are of importance to the people.	Referring to the "sources" (Who and what): Why do they have the right to tell you what is good and right for a Christian to do?
Ask for people who they look up to (PBC)	In a religious sense: Who has influenced you a lot in the past and who is influencing you right now? - Who is someone you look up to?
	Why do you look up to those people? Why do you find them inspiring?
	Who has the right to tell you that your thoughts and actions are not in line with your religion?
	Why do they have the right to correct you?
	What role has or had your family in your religious journey and shaping your thoughts about your belief?

Ask directly about the role of the Church Community	<p>Could you please talk more about the role your church community has in your life? E.g. Bible Study Group?</p> <ul style="list-style-type: none"> - How does it help you grow in your faith? - How does it support you? - Do you feel that different topics are accepted in your church community?
Ask directly about the role of the Church Leader	<p>Which role has the church leader for you in a spiritual sense?</p> <ul style="list-style-type: none"> - Why can he give you an advice? - how can the leader be an example?
	What role has the Bible for your spiritual life?
Environmental Issues	
Bring in the topic of sustainability in Jordan Mismanagement	I know Jordan is having major political and social challenges. But do you see also any environmental challenges in Jordan?
	I study a lot about water. And you often read: Jordan is poor in water.
Learn what kind of scientific facts they know. Source of water, state of ecosystems?	<p>What do you know about the water situation in Jordan? Do you think it's true that Jordan is poor in water?</p> <ul style="list-style-type: none"> - How does "the poverty" affect you in your normal life?
Check if they see a connection between their faith and the behavior. But: If they don't see a problem, why should the church care?	<p>Do you think the church should say something to this water situation? Why or why not?</p> <ul style="list-style-type: none"> - <pick up whatever is answered here> - what should Christians focus on instead?
	<p><Lead the discussion depending on whatever people said before> potential topics:</p> <ul style="list-style-type: none"> - interconnection religion & environment - what they do to mitigate water scarcity - reasons for unaction in society - knowledge about Christians/ church leader making environment a topic (e.g. Pope Francis) - purpose of nature, end of days

II. Details on Interviews

Notes for the Interviews: Full Interviews can be requested from the researcher. Permission depending on the agreement of interviewee.

Table 10: Details on Interviews

Date of Interview	Length
21.02.2019	40:35
01.04.2019	1:18:30
16.04.2019	1:10:00
04.05.2019	43:29
06.05.2019	1:18:16
07.05.2019	41:16
09.05.2019	1:27:16
18.05.2019	59:41
29.05.2019	1:14:24
30.05.2019	1:27:45
01.06.2019	45:10
08.06.2019	1:02:11
13.06.2019	1:39:16
21.06.2019	45:27
26.06.2019	1:09:15

III. Exemplary Transcription and Exemplary Coding

- Dots “...” → a pause. The more dots the longer the pause
- Words in brackets “(Yes)” → a verbal statement from the counterpart.
- Asterisks framing a word “(*laughs*)” → the person was doing this while speaking
- Square brackets [] → something was happening that did not belong to the interview / correcting a word that the interviewees used and otherwise would have meant something different
- Hashtags framing words or dots #Thank you#/#... ...# → Something was said in Arabic, sometimes it could be translated, sometimes not
- If there was a third person for translation:
 - 1: Interviewer
 - 2: Interviewee
 - 3: Translator

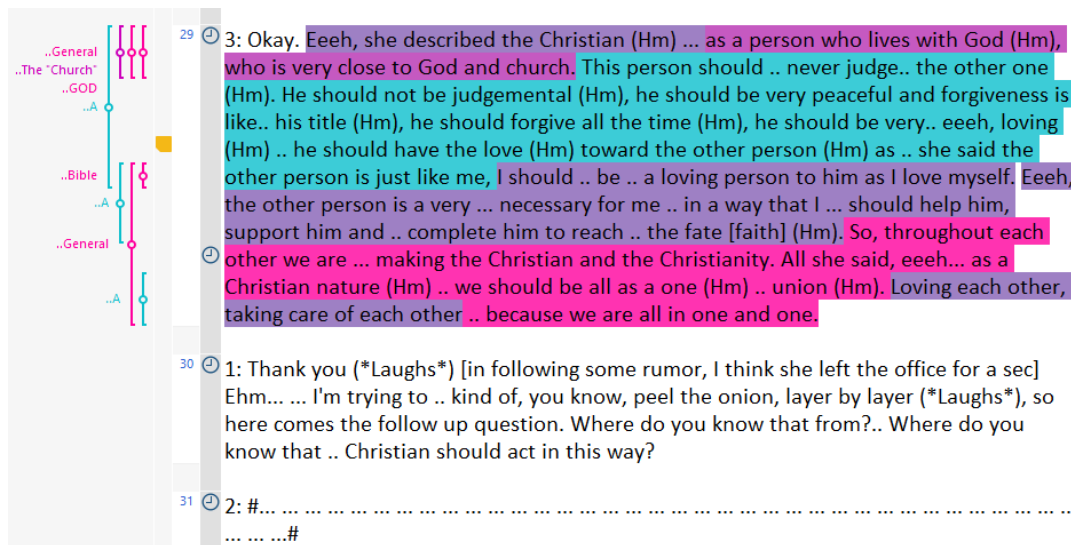


Figure 23: First Excerpt of an Interview

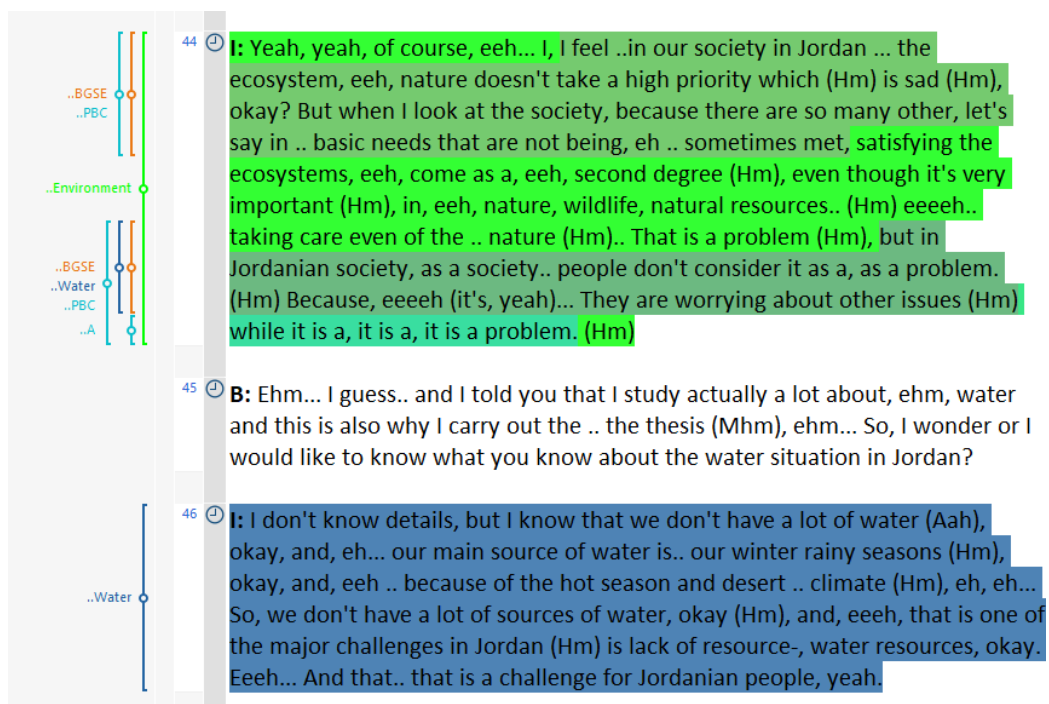


Figure 24: Second Excerpt of an Interview

IV. Declaration of Consent

Declaration of Consent for the Participation in a Scientific Interview

Responsible for the interview and its scientific evaluation:

Sonja Karin Burger
Institute for Technology and Resources Management in the Tropics and Subtropics,
University of Applied Sciences, Cologne, Germany
sburger@eritron.de
WhatsApp: +49 170 345 9024
Mobile: +962792837874

Purpose of the interview:

The interview will be used to retrieve information on how faith influences the behavior of Christians in Jordan. The interviews will only be used for scientific and non-commercial purposes. Relevant conclusions from the research will be put into perspective of one project of the German Development Cooperation Enterprise (GIZ), which is working with faith-based communities in Jordan.

Procedure:

The interview will be audio-recorded with a microphone. For the data analysis of the research the audio-file of the interview will be transcribed into text. Names of persons, places and institutions will be anonymized in the transcript. All data of the interview will be kept strictly confidential and used solely for the agreed purpose.

The transcript will not be a part of the annex within a publication (e.g. Master Thesis) and stored separately for possible future reference. Other researchers might receive the transcript only for other researches if the interviewee agreed. The recording will only be accessible to the interviewer.

Personal contact data (names, phone numbers, ...) will be made inaccessible to third parties. Upon completion of the research project all contact data will be deleted, unless the interviewee explicitly agreed to a further storage for contact possibilities. The interviewee may disagree with a longer storage at any time.

Rights of interviewee during the interview:

- The participation in the interview is voluntary.
- The interviewee might refuse to answer individual questions at any time.
- The interviewee can terminate the interview at any time without giving a reason and revoke permission to record.

Rights of the researcher:

- Extracts of the transcription, from which the interviewee cannot be identified, can be quoted in future research work or conferences.
- Extracts of the (anonymized) interview can be published on open data platforms.

I have read the declaration and I agree with it.

My contact details might be stored for further questions: ☐ YES ☐ NO

I have received a copy of this declaration.

Date

Name

Signature

V. List of Codings with number of codes

Table 11: List of all Codes and Number of Codes

Color	Highcode	Code	Codings of all documents	% Codings of all documents
●	Religious Influencers for Christians	Convictions, Worldview, Roles	0	0,00
●	Convictions, Worldview, Roles	General	154	6,42
●	Convictions, Worldview, Roles	Bible	153	6,38
●	Convictions, Worldview, Roles	GOD	193	8,05
●	Convictions, Worldview, Roles	Creation	91	3,79
●	Religious Influencers for Christians	The "Church"	127	5,30
●	The "Church"	Religious Members	0	0,00
●	Religious Members	Family	39	1,63
●	Religious Members	Friends	15	0,63
●	Religious Members	Community	65	2,71
●	Religious Members	Christendom	15	0,63
●	The "Church"	Religious Leaders	0	0,00
●	Religious Leaders	Leaders within the church	28	1,17
●	Religious Leaders	Leaders of the church	144	6,01
●	Religious Leaders	Leaders of churches	2	0,08
●	The "Church"	Teaching/Activity on Environment	66	2,75
●	Religious Influencers for Christians	R Others	139	5,80
●		External Influencers	0	0,00
●	External Influencers	BGSE	161	6,71
●	External Influencers	Water	107	4,46
●	External Influencers	Environment	68	2,84
●	External Influencers	E Others	37	1,54
●	External Influencers	E Convictions	30	1,25
●	External Influencers	Family & Friends	26	1,08
●	External Influencers	Other Religions	19	0,79
●		A, PBC, SN	0	0,00
●	A, PBC, SN	For general Intentions	0	0,00
●	For general Intentions	A	189	7,88
●	For general Intentions	PBC	62	2,59
●	For general Intentions	SN	94	3,92
●	A, PBC, SN	For Specifically Environment-related Intentions	0	0,00
●	For Specifically Environment-related Intentions	Enhanced EF Intention	0	0,00
●	Enhanced EF Intention	A	123	5,13

●	Enhanced EF Intention	PBC	12	0,50
●	Enhanced EF Intention	SN	64	2,67
●	For Specifically Environment-related Intentions	Unchanged or Diminished EF Intention	0	0,00
●	Unchanged or Diminished EF Intention	A	13	0,54
●	Unchanged or Diminished EF Intention	PBC	56	2,34
●	Unchanged or Diminished EF Intention	SN	17	0,71
●		General Action	44	1,83
●		EF Action	45	1,88

VI. Graphics of Analysis

a. Analytical Figures for Impact of Religious Influencers on Elements forming General Behavior

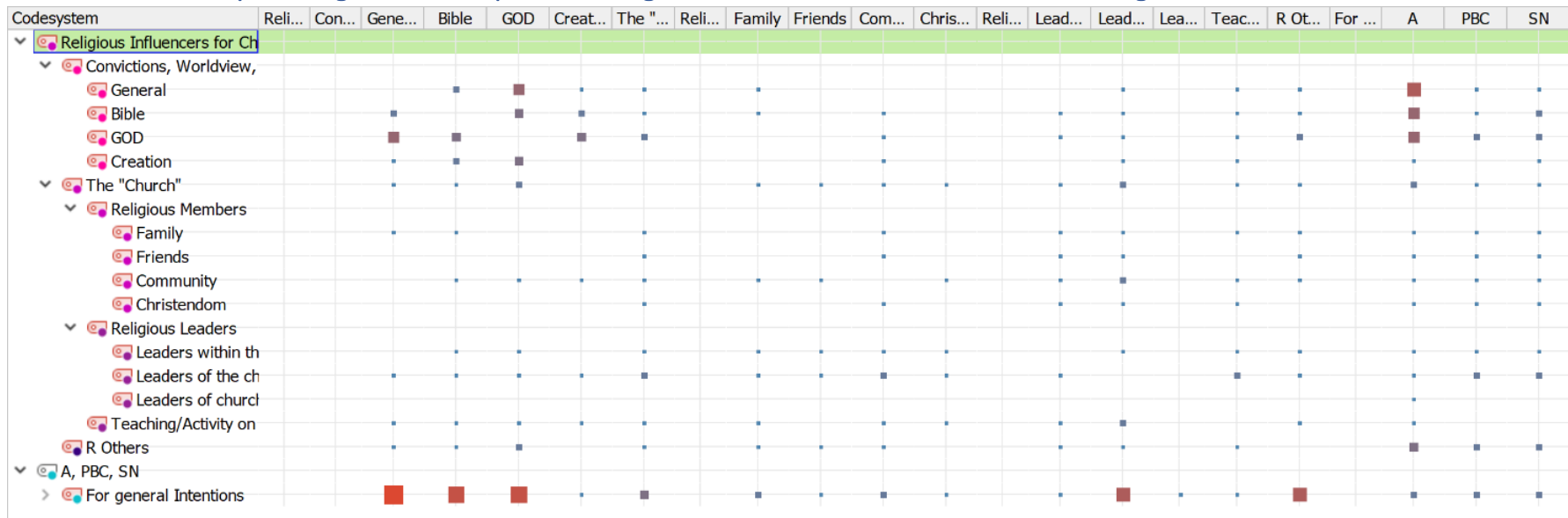


Figure 25: Impact of Religious Influencers on Elements forming Intention for general Behavior, I

Codesystem	Reli...	Con...	Gene...	Bible	GOD	Creat...	The "...	Reli...	Family	Friends	Com...	Chris...	Reli...	Lead...	Lead...	Lea...	Teac...	R Ot...	For ...	A	PBC	SN
Religious Influencers for Ch...																						
Convictions, Worldview,																						
General				21	46	9	10		2					9		5	6			68	10	7
Bible			21		33	23	10		2		7			1	7		5	10		49	8	17
GOD			46	33		31	15				8			1	9		3	15		43	16	17
Creation			9	23	31						1				2		4			12		2
> The "Church"			26	32	36	7	47		13	8	38	14		17	71		38	48		66	41	62
> R Others			6	10	15		10		1	1	9			7	13		7			31	15	20
A, PBC, SN																						
> For general Intentions			85	74	76	14	39		17	8	27	5		13	57	1	2	66		23	21	16

Figure 26: Impact of Religious Influencers on Elements forming Intention for general Behavior, II

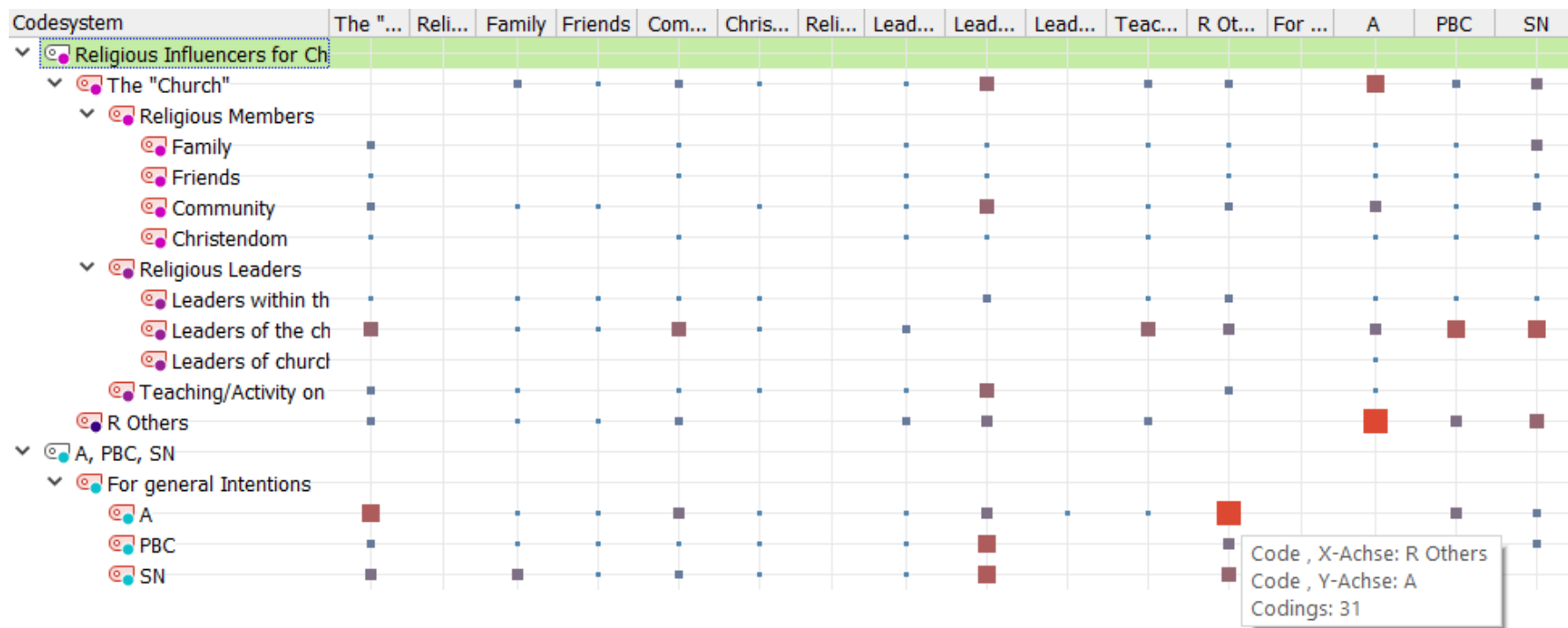


Figure 27: Impact of Religious Influencers on Elements forming Intention for general Behavior, III

b. Analytical Figures for Impact of Religious Influencers on Elements forming Environment-Friendly Behavior

Codesystem	Reli...	Con...	Gene...	Bible	GOD	Creat...	The "...	Reli...	Family	Friends	Com...	Chris...	Reli...	Lead...	Lead...	Lea...	Teac...	R Ot...	Enh...	A	PBC	SN
Religious Influencers for Chr																						
Convictions, Worldview,																						
General																						
Bible																						
GOD																						
Creation																						
The "Church"																						
Religious Members																						
Religious Leaders																						
Teaching/Activity on I																						
R Others																						
A, PBC, SN																						
For Specifically Environm																						
Enhanced EF Intentio																						

Figure 28: Religious Influencers on Elements forming Intention for environment-friendly behavior, part I

Codesystem	Reli...	Con...	Gene...	Bible	GOD	Creat...	The "...	Reli...	Family	Friends	Com...	Chris...	Reli...	Lead...	Lead...	Lea...	Teac...	R Ot...	Enh...	A	PBC	SN
Religious Influencers for Chr																						
Convictions, Worldview,																						
General				21	46	9	10		2					9		5	6			26	2	8
Bible			21		33	23	10		2		7			1	7		4	10		9		10
GOD			46	33		31	15				8			1	9		3	15		26	2	19
Creation			9	23	31						1				2		4			43		16
The "Church"			10	10	15				6	1	9	3		2	18		7	10		2		3
Religious Members			2	9	8	1	19		1	3	7	3		6	26		7	11		2		4
Religious Leaders			9	8	10	2	20		5	4	18	5		7	7		22	20		4	1	12
Teaching/Activity on			5	4	3	4	7		1		3	3		2	20			7		14	3	18
R Others			6	10	15		10		1	1	9			7	13		7			4	2	7
A, PBC, SN			36	19	47	59	5			2	3	1		1	16		35	13		13	6	11

Figure 29: Religious Influencers on Elements forming Intention for environment-friendly behavior, part II

Codesystem	Ext...	BGSE	Envir...	Water	E Co...	Famil...	Othe...	E Oth...	Enh...	A	PBC	SN
External Influencers												
BGSE												
Environment												
Water												
E Convictions												
Family & Friends												
Other Religions												
E Others												
A, PBC, SN												

Figure 30: External Influencers on Elements forming Intention for environment-friendly behavior, part I

Codesystem	Ext...	BGSE	Envir...	Water	E Co...	Famil...	Othe...	E Oth...	Enha...	A	PBC	SN
External Influencers												
BGSE			20	19	2	5	4	1		7	1	10
Environment		20		6	2			1		19	1	3
Water		19	6		1	5	1	4		32	3	9
E Convictions		2	2	1			2			10		
Family & Friends		5		5			2	1		2	1	3
Other Religions		4		1	2	2				1		
E Others		1	1	4		1				5	1	4
A, PBC, SN		18	23	44	10	6	1	10		13	6	11

Figure 31: External Influencers on Elements forming Intention for environment-friendly behavior, part II

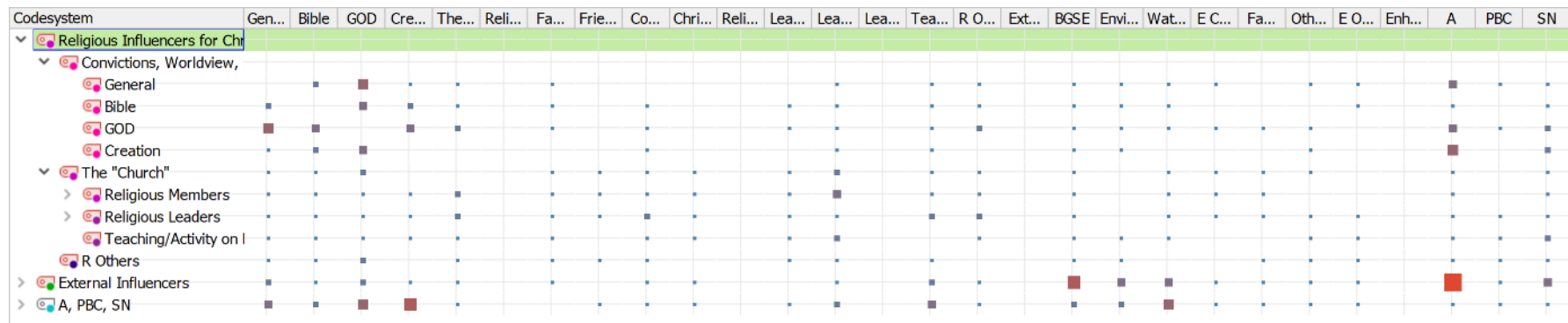


Figure 32: Combined Influences of RI and EI on Elements forming Intention for environment-friendly behavior

c. Analytical Figures for Impact of Religious Influencers on Elements forming Environment-Unfriendly Behavior

Codesystem	Ext...	BGSE	Envir...	Water	E Co...	Famil...	Othe...	E Oth...	Unc...	A	PBC	SN
External Influencers												
BGSE												
Environment												
Water												
E Convictions												
Family & Friends												
Other Religions												
E Others												
> A, PBC, SN												

Figure 33: External Influencers on Elements forming Intention for environment-unfriendly behavior

Codesystem	Gen...	Bible	GOD	Cre...	The...	Reli...	Fa...	Frie...	Co...	Chri...	Reli...	Lea...	Lea...	Lea...	Tea...	R O...	Ext...	BGSE	Envir...	Wat...	E C...	Fa...	Oth...	E O...	Unc...	A	PBC	SN
Religious Influencers for Ch																												
Convictions, Worldview,																												
General																												
Bible																												
GOD																												
Creation																												
The "Church"																												
Religious Members																												
Religious Leaders																												
Teaching/Activity on																												
R Others																												
External Influencers																												
A, PBC, SN																												

Figure 34: Combined Influences of RI and EI on Elements forming Intention for environment-unfriendly behavior, part I














Codesystem	Gen...	Bible	GOD	Cre...	The...	Reli...	Fa...	Frie...	Co...	Chri...	Reli...	Lea...	Lea...	Lea...	Tea...	R O...	Ext...	BGSE	Envi...	Wat...	E C...	Fa...	Oth...	E O...	Unc...	A	PBC	SN
▼  Religious Influencers for Ch																												
▼  Convictions, Worldview, and Church																												
 General		21	46	9	10		2					9		5	6		2	1	2	5		1	3		1	1	2	
 Bible	21		33	23	10		2		7		1	7	4	10		4	2	1					1					
 GOD	46	33		31	15				8		1	9	3	15		5	3	1	2	1	4				3	1	1	
 Creation	9	23	31						1			2		4			1	6				2			3	1	2	
▼  The "Church"	10	10	15				6	1	9	3		2	18	8	10		7		1	2	1	1				1	1	
>  Religious Members	2	9	8	1	19		1	3	7	3		6	26	7	11		3		1	1	3						2	
>  Religious Leaders	9	8	10	2	20		5	4	18	5		7	7	22	20		2		2	1	1	5	1			1		
 Teaching/Activity on	5	4	3	4	8		1		3	3		2	20		7		3	3	4			2	1		2			
 R Others	6	10	15		10		1	1	9			7	13	7			3	1			1	1	1			1	1	
>  External Influencers	14	8	16	9	12		4		3	1			12	13	7		51	29	36	7	13	9	7		11	64	9	
>  A, PBC, SN	4		5	6	2				2				1		2	2		38	6	30	3	1	1	5		1	5	4

Figure 35: Combined Influences of RI and EI on Elements forming Intention for environment-unfriendly behavior, part II

Declaration in lieu of oath

By

Sonja Karin Burger

This is to confirm my Master's Thesis was independently composed/authored by myself, using solely the referred sources and support. I additionally assert that this Thesis has not been part of another examination process.

29.09.2019

Place and Date

Sonja Burger

Signature

